WE whoſe Names are here Subſcrib'd, having perus'd this Diſcourſe, Entitled, *Medicina Gymnaſtica*, &c. Judge it well Worthy to be Communicated to the Publick.

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Medicina Gymnastica:

OR, A

TREATISE

Concerning the

POWER of EXERCISE,

With Respect to the

Animal Oeconomy;

AND THE

Great Necessity of it in the Cure

OF

Several Distempers.

By *FRANCIS FULLER*, M.A.

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MVSEVM
BRITAN
NICVM

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THE PREFACE.

THE Generality of Men, have for a long time had too Narrow Thoughts of Phyſick, as if it were in a manner Confin'd to little more than Internals, without allowing themſelves the Liberty of common Reaſoning, by which they eaſily might have found that the Humane Body is liable to, and requires ſeveral Adminiſtra-

tions of a very Different Nature, and that it is very unreasonable to suppose, that since there are so many ways for Diseases to enter upon us, there should be so few for Health to return by. Internals do indeed make up the far greatest part of the Means of Cure, but yet there are Considerable Cases, where the very Nature of the thing requires other Methods; and this would appear very obvious, if it were not for our too Partial Consideration of the Body of Man, by attributing too much to the Fluids, and too little to the Solids, both which

which, tho' they have a Mutual Dependance upon one another, yet have each of 'em ſome Proprieties, and if out of Order, require ſomething particular in the Application to reſtore 'em again. Conſent in the Solids, anſwers to Mixture in the Fluids; and as an ill Ferment, as ſoon as it comes into the Blood, diffuſes and mixes it ſelf with the whole Maſs, and cannot often be extirpated, till the Medicine given for that End, has been taken ſo long as to be diffus'd and intimately mix'd with the Blood likewiſe; ſo a Violent Seizure in one of

the Solid Parts, commonly draws all the reſt into Conſent, and a particular Application to the Place primarily affected ſhall do no good, when a Univerſal one ſhall Cure; and a thing which would be trivial and Vain, if us'd as a Topick, ſhall by a Univerſal Adminiſtration prove of the greateſt Importance. We ſee Contraries often prove Remedies to one another in the Juices, and Poiſons become Beneficial, when oppos'd to certain Humours, why ſhould we not then allow of the ſame Rule in the Containing Parts of the Body? If by a Supine

pine Courſe of Life, the Nervous parts are weakened and relax'd, why ſhould we not ſuppoſe the contrary way of Living, the moſt likely to repair 'em? Since the Vigour of thoſe parts is acquir'd by Uſe; they are the Active part of the Man, and not always liable to the Impreſſions of the Fluids, for tho' you invigorate the Blood ever ſo much by the moſt generous Medicines, the Nerves may remain Effete and Languid notwithſtanding; but if the Nervous parts are extended and exercis'd, the Blood and the Humours muſt neceſſarily partake

of the Benefit, and ſoon diſcover it by the Increaſe of their Heat and Motion. There is ſo much of a Relative Nature in every thing, that can concern the Health or Diſtemperature of the Individual, that there is ſcarce any thing ſo prejudicial, or ſeemingly Abſurd, but may in different Circumſtances prove as Advantageous. The World has lately had full Evidence of the good Effects of an Intenſe Cold, equally apply'd to all the Parts of the Body at once, which Method of Curing would, not many Years ago, have been thought very Extravagant, and cer-

certainly Deſtructive. On the contrary, there are other Caſes, where a Warm Bath is only prevalent ; and though ſome People have ſuppos'd it to be only a kind of a laſt Reſort, when other things have been try'd in Vain, yet it is quite otherwiſe, it being impoſſible to remove ſome Diſeaſes of the Limbs, without an univerſal equal Relaxation. Again, quite different from this is the equal Diſtribution of a greater Degree of Heat throughout the whole Body, which is procur'd by Habitual Exerciſe ; in the former Method, the Parts are re-

lax'd, in this they are ſtrengthned, and in every Reſpect the Effects are widely different, tho' in both ways there is a conſiderable Encreaſe of Heat. But to carry this enquiry farther, there are ſome Diſtempers, and thoſe not altogether ſo rare neither, in the Cure of which no Poſitive Phyſick of any ſort whatſoever, can be ſerviceable, nothing but a gradual Subſtraction of the Cauſe, an Alterative Abſtinence, if I may ſo ſpeak, being neceſſary; as there have been ſome Gouts in ſome temperate Perſons, of a ſtrong and rank Conſtitution, which

nothing

nothing could remove but a very low Diet, and an entire Abſtinence from Fleſh; to them Fleſh being as Wine is to others, who Contract that Diſtemper by their Exceſs: and the ſame Obſervation holds good likewiſe in the Opthalmia, *and ſome other Caſes of the Eyes, as any that will duly weigh the Circumſtances of ſome Perſons often ſubject to 'em, will find Reaſon to believe; ſo that ſome Men are by their Conſtitutions condemn'd to an Antediluvian Diet of Roots and Vegetables, or elſe to ſuffer worſe Inconveniencies; and when thoſe happen, it is abſurd to expect, by*

the

the moſt Celebrated Remedy to Cure the Diſeaſe, when the Cauſe continues. Theſe are Inſtances of ſeveral Methods, widely differing from one another, and yet of abſolute Neceſſity in their particular Caſes, which ſhews us, that we ought not to be ſo eager after Courſes of Pharmacy in all Caſes, without diſtinguiſhing where other ways are more rational. It is one thing to diſpoſe Nature to collect her own Strength, and throw off her Enemy; and it is another to aſſiſt her by the Corpuſcula, *the Minute parts of a Medicine given inwardly; the firſt way has Regard to the whole*

whole Animal Oeconomy; the ſecond reſpects the Blood and Juices chiefly; the firſt may ſucceed, where the ſecond cannot, becauſe here the Laws of Motion, and the Rules of the Oeconomy are enforc'd, and brought to be aſſiſting to a Recovery of Health, which in ſome few Caſes can't be effected by a private and ſimple Attempt upon the Blood only.

Theſe are Notices which don't lie ſo far out of the reach of any Man, that will give himſelf leave to animadvert upon the Misfortunes of his Neighbours, but that they may be

be discern'd; and if they were duly consider'd, there could be no room for Empiricism, for that is founded on the Folly, or Negligence of Mankind; and if Men will give themselves up to Expectation, and resolve to be always alike Passive, in Hopes the Miracle will be wrought upon 'em, without any Concurrence on their part, it is but just they should suffer something from the Pedantry, the little things of the Profession, which they are so dispos'd to receive.

As for the Exercise of the Body, which is the Subject of this ensuing Discourse, if People

ple would not think ſo ſuperficially of it, if they would but abſtract the Benefit got by it, from the Means by which it is got, they would ſet a great Value upon it; if ſome of the Advantages accruing from Exerciſe, were to be procur'd by any one Medicine, nothing in the World would be in more Eſteem, than that Medicine would be; but as thoſe Advantages are to be obtain'd another way, and by taking ſome Pains, Mens Heads are turn'd to overlook and ſlight 'em. The habitual increaſing of the Natural Heat of the Body, as I took Notice above, is not to be deſpis'd; but if we conſider

that

that it is done without charging Nature with any ſubſequent Load, it ought to be more valuable, for I may by ſome generous Medicine, or a Glaſs of Wine, raiſe Nature to a great Pitch for a time, but then when theſe Ingredients come to be digeſted and reſolv'd into their Principles, Nature may be more oppreſs'd with the Remains of the Medicine, than ſhe was at firſt relive'd by it: Therefore if any Drug could cauſe ſuch an Effect, as the Motion of the Bod does, in this Reſpect, it would be of ſingular Uſe in ſome tender Caſes upon this very Account; but then add to this

the

the great Strength, which the Muſcular and Nervous parts acquire by Exerciſes, if that could be adequately obtain'd likewiſe by the ſame Internal Means, what a Value, what an extravagant Eſteem, would Mankind have for that Remedy, which could produce ſuch wonderful Effects? But ſince thoſe Benefits are to be procur'd another way, how difficult is it to bring People to conceive it? To build up ſuch a Belief in the Minds of Men, is to raiſe a Structure, the Foundations of which, can be laid with no leſs Difficulty, than the removing of the Rubbiſh of a Vulgar Error.

As

As for what I have ſaid, relating to the Balſamick Method in the Cure of Conſumptions, tho' I may perhaps give Offence to many, yet I am ſure I ſpeak the Thoughts of ſome of the greateſt of the Profeſſion, if not of the generality of Phyſicians, who have for a great while, had a ſecret Regret, at the ill Succeſs of thoſe Means, which nothing could have ſtifl'd and ſuppreſs'd, but the Difficulty of agreeing to ſubſtitute better. This I do not pretend to do neither, this would be too daring an Enterprize for me; I only point out ſome few Miſtakes, which one of my little Conſideration, may ſometimes

ſometimes diſcern in the Actions of thoſe of greater Condition. And perhaps when theſe Miſtakes are rectifi'd, the Buſineſs is done, as well as if I had diſcovered to the World, ſome wondrous Medicine, dignifi'd with as many and as ſwelling Titles, as an Eaſtern Monarch; for it ſeems to me to be a great Miſtake, to wait for ſome Medicine of a great Character, to be the Specifick, or Certain, or Adequate Remedy of this Diſeaſe. I am inclin'd to think, that the Cure muſt reſult as much from ſome Circumſtances of Management, as from any Medicine.

I believe we have the beſt of Medicines for this Caſe, in our Hands, if we did but take Pains to obviate ſome minute Circumſtances that make thoſe Medicines often prove deficient; if the Succeſs did not vary by Reaſon of ſuch ſmall Emergencies, I don't know how we ſhould account for what we find to be true, viz: *that ſome common and deſpicable Medicines ſhall in one Perſon produce a wonderfull Cure, and in another do nothing at all, tho' as far as Humane Wiſdom can diſcern, the Caſe is exactly the ſame in both; and why ſhould it*

ſeem

ſeem ſtrange, if this ſhould happen in Caſes, ſo fine as thoſe of the Lungs, when we ſee in ſeveral Manufactures the Accuracy and Perfection of an Operation ſhall depend upon a certain Fineſſe, *the* Criterion *of which is ſcarce to be deſcrib'd, but to be learn'd only by Numerous Repetitions. A Man may be told the Ingredients of a Compoſition, and the way of working 'em up; may ſee it done, and not be able to diſtinguiſh the Nicety of the Circumſtances, which conſpire to make the Work conſummate. Do not we know, that in the* Dyers Trade, *(to*

give but one Inſtance) their Mixtures ſhall ſometimes miſcarry, and the beſt Artiſt not be able to ſhew a Reaſon for it. Now if it is thus in matters of Artifice, I think we may with great reaſon ſuſpect ſomething of a like Nature in ſome few Caſes of the Humane Body; in theſe Maladies of the Breath, there is a Fineſſe *peculiarly diſtinguiſh'd from the Circumſtances of any other Diſeaſes, as is apparent from the Power of ſo fine a Body as the Air; and therefore we need not think it ſo ſtrange, that a little matter ſhould be able to give a good or bad turn. And if this will be allow'd to*

be

be good Reaſoning; what can be ſo likely to obviate ſuch Miſcarriages, as a due Application to that moſt moderate and eaſie Exerciſe, which I have apply'd to the Cure of this Diſtemper? That a mild Exerciſe will do ſomething like this, may be learnt from the Effects of thoſe which are more violent; we know very well what has follow'd upon going into the Bagnio, *after violent Exerciſes, the Blood of thoſe Perſons who have done ſo, has been ſo exalted in its Craſis, as to be upon that very account, fatally Preternatural; tho' upon the firſt Thought, One would be apt to conclude,*

that ſuch violent Perſpirations ſhould rather impoveriſh the Blood; but it is quite contrary, juſt as in Hot Climates, tho' People Sweat profuſely, yet they are rather the more Brisk and Lively for it. And thus Moderate Exerciſe, by Augmenting the Natural Heat of the Body, will enrich the Fluids, and by encreaſing the Velocity of the Circulation, every the minuteſt Particle will be brought much oftner to the Teſt of the Strainers, than otherwiſe it would have been; ſo that both the Venous Fluid and the Spirits will after an Eminent Manner be exalted,

and

and as it were Rectifi'd in the making. Therefore it cannot be a doubt, that theſe means may improve a Medicine, when it comes into the Blood, ſupply its deficiency, and remove the Inſcrutable Impediments in the Cure of ſo nice a Diſeaſe, as this I am ſpeaking of.

Theſe things are not owing to Notion and Speculation, but to Practical Obſervation; I cannot tell otherwiſe how to explain what I have ſeen to be the Effects of ſuch means; I have ſeen a Poor Gentleman at Hampſtead, *in the moſt deplorable extremity*

of a Conſumption, betake himſelf to Riding twice or thrice a day, upon his Waters, put a ſtop for a time to his Diſtemper, and keep Death as it were at a Bay for ſome Weeks; which plainly ſhew'd, that if he had done ſo ſooner, his former Medicines would undoubtedly have took effect; and how ſhall I account for this, but after ſome ſuch manner as I have here inſiſted on? This is the Sum of my Thoughts on this Caſe, and if it does not ſtrike the Imaginations of ſome People with ſo much Surprize, as other Pharmaceutick Diſcourſes, I cannot help it; nay, if any

ſhould

ſhould be ſo hard upon me as to alledge, that I am quite miſtaken in the Cure of this Diſeaſe, when far advanc'd, let it be ſo ; yet I hope they will allow me thus much, that it appears plain enough, for the Nature and Power of Exerciſe, that we ought to diſtinguiſh in this Diſtemper in like manner as we do in another, which it would not be good Manners to mention, at the ſame time with the Conſumption of the Lungs ; in which latter Caſe, if a Young Debauchee *happens to get a Misfortune, he does not let it run on till it come under another Denomination, but looks out for a preſent*

ſent Cure, which may then be certainly obtain'd; and ſo I think it is no leſs obvious, if Exerciſes be as efficacious as I aſſert, that it is in our Choice, whether a Cough ſhall run on to a Conſumption; that is, I underſtand, that when a Cough comes to laſt above a Month, and begins to chop in its Indications, to require one while incraſſating Medicines, another while attenuating ones; I ſay, it is high time to look out, and ſet upon a reſolute Courſe of Riding; that by a Series of Journeys, continued Day after Day without intermiſſion, the obſtructed Perſpirations may be reſtor'd, which may

may then be eaſily effected, be cauſe the Body not being then much impair'd, ſo many Millions of Succuſſions coming cloſe upon one another, muſt affect both the Strainers of the whole Body, and the Juices to be ſtrain'd; and he who can oppoſe a Truth ſo manifeſt, muſt fly in the Face of Nature, and deny the Principles of the Oeconomy.

Having had ſome Occaſion to mention the Ancients, and ſince Gymnaſtick Courſes made a great part of their Phyſick, perhaps ſome will think I am ſetting up for one of thoſe who cry up the Ancients upon all occaſions, out of pure Enmity to the

the Authors of Modern Discoveries, but they will find themselves mistaken; I neither affect to be of a Party in Physick, or Singular; I seldom yet knew any one, who cry'd up Acids, *or cry'd down* Bleeding, *who extoll'd the* Ancients *universally, and vilifi'd the* Moderns, *but if he really understood what he pretended to, had some By-end to serve in so doing. I owe the Ancients no more Respect, than what is due to those upon whose Shoulders we stand, and upon whose Rudiments we have Built; we know their Ætiology was all wrong, their Pharmacy in general was Rough and Barbarous.*

rous. (*I ſay in General, for there are ſome few Caſes in which their Medicine will perhaps laſt for ever,*) *but yet the ways they took to ſupply their want of Medicine were very commendable, and may ſhame us; their exquiſite diligence in eſtabliſhing certain Diagnoſticks, and their Recourſe to various Exerciſes to help out what they wanted in other means; 'tis the laſt of theſe which has given me occaſion to take Notice of 'em, and I think it will appear in the following Diſcourſe to be of ſo much Importance, that not only in their days, but in ours alſo, the Art of Curing may be ſaid to be in ſome Meaſure*

ſure imperfect without it, there being ſome Caſes in which the Uſe of Exerciſes will be abſolutely neceſſary as long as Nature ſhall laſt.

I have this more to add, that I did not take this Subject out of Choice but neceſſity; 'tis not owing to Theory and Speculation, but Experience; the ſevereſt Experience, which my own Misfortunes have given me but too much occaſion to make in a Diſtemper, which ſome Years ago I happen'd to be afflicted with, as I have related in the Appendix *to this Treatiſe; 'twas under that ſevere Diſcipline I made moſt of the Obſervations of this Trea-*

Treatiſe; and tho' mine was an Anomalous and ſingular Caſe, yet from what I perceiv'd to be the immediate Effects of that Exerciſe in common to all, and from the manner by which it caus'd my Diſtemper to give way, I could not but diſcern in what other Caſes it was likely to be of the ſame Conſequence, and I have had ſo very many Serious and Calm hours to confirm me in theſe Notions, that I cannot think I have extended 'em too far.

As for what Reception theſe Papers are like to meet with, tho' I have ventur'd abroad in a Cauſe ſo obſolete, in an Age ſo fruitful in Pharmacy, and abound-

abounding in Splendid Diſcoveries; and tho' I am deſtitute of a New Hypotheſis, that Specious Image of Truth, that Idol to which the Learned all bow down; yet, if what I have advanc'd be ſtrictly Conformable to Truth, and of real Neceſſity in ſome few Extremities, I hope I may paſs, upon the Merits of my Subject, tho' without Flouriſh and Ornament.

Medi-

Medicina Gymnaſtica:

OR, A

TREATISE

Concerning the

POWER of EXERCISE

With Reſpect to the

Animal Oeconomy.

THAT the Uſe of Exerciſe does conduce very much to the Preſervation of Health, that it promotes the Digeſtions, raiſes the Spirits, refreſhes the Mind, and that it ſtrengthens and relieves the whole Man, is ſcarce diſputed by any; but that

it ſhould prove Curative in ſome particular Diſtempers, and that too when ſcarce any thing elſe will prevail, ſeems to obtain little Credit with moſt People, who tho' they will give a Phyſician the hearing, when he recommends the frequent Uſe of Riding, or any other ſort of Exerciſe; yet at the bottom look upon it as a forlorn Method, and the Effects rather of his Inability to relieve 'em, than of his Belief that there is any great matter in what he adviſes: Thus by a negligent Diffidence, they deceive themſelves, and let ſlip the Golden Opportunities of recovering, by a diligent Struggle, what could not be procur'd by the Uſe of Medicine alone.

Whether this proceeds from the Cuſtom of theſe Northern Nations, ſo different from thoſe

of

of the Ancients, and of more Southern Countries, who ſeem to have plac'd almoſt as much in their Methods of Exerciſe, as in the internal Phyſick; or whether from the narrow Notions moſt People have conceiv'd of the Art of Phyſick, as if it imply'd little more than Internals only, without conſidering that External, Mechanical, and all other Means whatſoever, that give Relief, properly belong to it; this I ſhall not pretend to determine: but this, I think, I may venture to affirm, That moſt Men indulge themſelves in the Expectation of more ſudden Relief, than the Nature of the Caſe will admit of, as if they thought that Medicine was always to take like a Charm, without putting 'em to the Expence of much Time or Pains; they do not conſider the wonderful Variety of the Diſorders

of Nature, and the Stubbornneſs of ſome Caſes, which will not permit the Sick to be wholly paſſive, but indiſpenſably oblige him to conſpire with his Phyſician, and ſtrive indefatigably to exalt his Conſtitution to a degree requiſite to ſupply the Defect of internal Phyſick; which induſtrious ſtriving on the part of the Sick, being what is here meant by Exerciſe, and which it is my purpoſe to repreſent, as more efficacious than it is generally believ'd to be; I think it proper, firſt to explain what I mean by it in this place.

By *Exerciſe* then, I underſtand all that Motion or Agitation of the Body, of what kind ſoever, whether voluntary or involuntary, and all Methods whatſoever, which without the Uſe of Internals, may (or without which Internals

ternals alone may not always) ſuffice to enable Nature to expel the Enemy which oppreſſes her; confining my ſelf to the Conſideration of it only as it may prove Curative, not as Palliative, or barely Preſervative.

And here, before I attempt to demonſtrate how Exerciſe proves ſo beneficial in ſome few Caſes, it may not be amiſs to premiſe briefly ſome of the ways Nature takes to relieve her ſelf, when in danger of being oppreſs'd, which may ſerve to illuſtrate my following Diſcourſe; as likewiſe ſome Inſtances of the Efforts of Nature, caus'd by external Application, or at leaſt by ſuch Internals as cannot be ſuppos'd to be Cordial or Vinous, or to be aſſimilated with the Blood and Animal Spirits.

First, then; We may obſerve how Nature acquits her ſelf of what we commonly call a Cold, wherein a conſiderable quantity of the *Materia perſpirabilis* is detain'd, by a ſudden Conſtriction of the Pores of the Skin, we ſhall find, that after ſome time the ſaline Particles growing turgid, vellicate ſome Fibres of the fifth Pair of Nerves diſpers'd about the Noſe, which by conſent draw the Diaphragm into a Convulſive Motion, by which the Air is preſs'd out of the Lungs thro' the Noſe with ſome Violence; and by the ſhock the Glands of thoſe Parts are open'd, and the Humour, which was detain'd, is let out. This is *Sneezing*; to which frequently is joind *Gauping* or *Retching*, another Method of Nature to ſhake off a Load that ſhe finds growing upon

upon her; this is more often repeated than *Sneezing*, and may be conceiv'd to dilate ſome internal Parts by thoſe Stretchings out of the Limbs, and more plentiful Inſpiration; *Sanctorius* tells us in the 31ſt *Aphoriſm* of his *fourth* Section, that, *Corpora Oſcitatione & Pandiculatione horæ dimidiæ ſpatio magis perſpirant, quam tribus horis alterius temporis*, and compares it to a Cock's clapping his Wings after his Reſt; ſo that it is manifeſt, that even in that vulgar Affect there is an Alteration cauſed in the Body, that is not Contemptible.

To theſe may be added the *Singultus* or Hiccough, by which the Ventricle, when too full, endeavours to relieve her ſelf, either by throwing off ſome of the rarifi'd Contents by the Gullet, or perhaps by the *Pylorus*.

Laſtly, Let us conſider how *Laughter* affects us, and it will appear, that this Contrivance of Nature, wherein the Body does ſympathize with the Mind, proves ſo beneficial, by the playing of the Muſcles of the *Thorax*, and the preſſing out of the ſaline Particles, ſo frequently and ſenſibly as it does in ſome chearful People, to whom it is more habitual than others, inſomuch that it comes to be Proverbially, a Cauſe of Fatneſs. All theſe Inſtances ſhew, that Nature ſeems to receive more Relief from the Compreſſion or acting of the containing Parts ſtrictly taken, than moſt Men eaſily imagine.

As to extraordinary Efforts of Nature, to paſs by what happens upon a ſudden Surprize, Fear, Paſſion, or the like; it is certain, that Torture will raiſe the Spirits, for ſome time, very much, and

and there are as great Effects follow upon Irritation, which does not come up to the perfect Notion of Torture. What wonderful Effects do we ſee produc'd by ſtrong Emeticks given by Surgeons in ſome Caſes of the Limbs and extreme Parts? Where a Perſon ſo griev'd has oftentimes a robuſt Conſtitution and perfect Health, there the Medicines, tho' given inwardly, cannot be ſuppos'd to act after the common manner of Alteratives, by paſſing into the Blood, by the Spirituouſneſs of their Parts, or the like; for the Perſon being in Health needs no Alteration to be made in the Blood, and other Juices, which are as good as they can be deſir'd to be; but by the Irritation of the Fibres in the Ventricle, the Spirits are rais'd to the higheſt pitch they are capable of, and brought to communicate that Elaſticity to the

the whole Body, all the Springs of Life are wound up, all the Pumps of Nature (if I may ſo ſpeak) ſet a playing, and by theſe means the Agony is extended to the extreme Part affected, and the Matter fixt there is attenuated and brought to flow, that it may be abſorb'd by the Blood, and diſcharg'd in the Circulation; Nay, we may take notice of the great Power of a more gentle Irritation of thoſe Fibres in thoſe weaker *Hyſterical* People, whoſe Spirits are of ſo fine a Make, or ſo ſcatter'd and weakned, that they can't long bear Faſting, without very troubleſome Symptoms following upon it, for they, we may perceive, are in a ſenſe ſtrengthen'd at thoſe times that the Contents of the Stomach happen to be ſo rarifi'd, as to cauſe a gentle *Ægritudo*, a lingring Sickneſs and Nauſeouſneſs, tho' not ſufficient to cauſe 'em to vomit,

for

for they ſhall then diſpenſe with the want of that Food, without which at other times they could not poſſibly ſubſiſt with any tolerable Eaſe, and find themſelves as ſtrong and as free from their Tremors, Shiverings, and other ill Symptoms, as if they had eat and drank plentifully; and likewiſe during that Sickneſs the Salts ſhall come off plentifully in the Urine, which will then recover its proper Colour, tho' it was before as limpid as common Water; from hence it is manifeſt, that the Animal Spirits may be made to expand, dilate, or in ſome ways act upon themſelves, without the encreaſing their quantity by ſuch internal Medicines as may be ſuppos'd to be converted into their Subſtance.

Having premis'd theſe things, I ſhall proceed to enquire, after what manner Nature endeavours to

to clear her ſelf of ſome few Diſtempers, which I ſhall conſider in their proper place, and likewiſe how ſhe may more eaſily ſucceed in thoſe Endeavours, if duly aſſiſted by moderate Exerciſe; which Aſſiſtance, if it at firſt View may ſeem too ſlow and gentle to produce ſo great Effects, will yet with the Allowance juſtly due to all ſorts of Alterative Phyſick, *viz.* of a Habit or frequent Repetition, appear to be ſufficient to procure thoſe Ends I ſhall aſſign to it.

There is this Difference between the moſt compleat Productions of humane Artifice, and that Divine Piece of Mechaniſm, the Body of Man, that the former are always the worſe for wearing, and decay by Uſe and Motion; the latter, notwithſtanding the Tenderneſs of its Contexture,

texture, improves by Exercise, and acquires by frequent Motion an Ability to last the longer; and tho' the Circulation, and continual and infinite Succession of Particles, are the immediate Cause of Life, yet the Health, the Strength, the Well-being of the Individual, is in great part owing to the Effects of a General Motion superinduc'd to these internal Motions; which it is so far from disordering, that it aids and assists 'em to a greater degree than we are wont to imagine; for in our Considerations of the Animal Oeconomy, we seem to regard Nature only as in a quiescent State, without a due Allowance for the Alterations caus'd by the Motion of the whole, which yet are confess'd by all to be sometimes of great Consequence: For that General Motion acting both on the Fluids and

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Solids of the Body, may ſometimes prove the laſt and beſt Reſort for the Reſtoring the *Equilibrium* between 'em.

As for the Fluids; One would think the Shape and Make of the Blood-Veſſels were ſufficient alone to lead us into an Opinion of the Neceſſity of Exerciſe; by reaſon they all terminate in a Cone, they muſt needs reſiſt the Paſſage of the Blood incomparably more than they would have done if they had been Cylindrical; and tho' all the Branches of the Capillary Arteries, would, if taken Collectively, make a greater Diameter than that of the great Artery, yet the Conſiſtence of the Blood, and the extreme Fineneſs of thoſe inviſible Meanders, require the frequent Preſſure and Aſſiſtance of the Muſcles to encreaſe the Circulation, which accordingly we always find

find very much augmented by thoſe Means; yet 'tis the Reſult of this ſwifter Current of the Blood, which ſhould be moſt valuable to us, I mean the better Digeſtion and Mixture of the various Particles convey'd into the Blood. I believe it will be allowed on all hands, that the beſt way to bring an Animal Fluid to a greater degree of Perfection, is Digeſtion; and the Excellency of that Operation conſiſts in the juſt Degree of Heat which cauſes it; or, to ſpeak perhaps more properly, in the juſt Agitation or inteſtine Motion of the Particles which may be ſuppos'd to occaſion that Heat. The Standard or Meaſure of this Heat or Agitation in the Animal Oeconomy, is to be taken from what we obſerve in a Man in perfect Health, and in the Prime of his Age; when his Blood flows with its due

due Velocity, when there is an uninterrupted Secretion of all that is disagreeable to it, and it is wrought up to its florid Consistence, and a just Proportion between the Serous and Grumous Parts. Now this we may successfully imitate by repeated Exercise; when the Blood happens to be impoverish'd and Languid, we may encrease the Velocity of the Circulation, and consequently the Heat following upon it, by which a great many crude Particles will be attenuated and ripen'd, either for Mixture or Secretion, and there will be an equal Distribution of the attenuated Particles to the several Emunctories of the whole Body, by reason of the Solids co-operating with the Fluids; whereas it is often quite otherwise, when an internal Medicine is given design'd for one Secretion only, which may promote

mote that, and perhaps hinder another; as a Medicine which agrees with the Stomach, ſometimes offends the Head; for the Nervous Parts being, as it were, Paſſive in the Caſe, the Secretions cannot be ſo equally performed as when the whole Body is exercis'd. I would not be here miſ-underſtood, as if I ſuppos'd that this firſt Effect of Motion, this Digeſtion, would avail in many Caſes, as where an ill Ferment is lodg'd in the Glands, or where the Morbifick Particles have been long a forming, and are ſtrongly combin'd in the Blood, but this may take place where a greater degree of Agitation is abſolutely neceſſary; as when the Blood is Effete and Languid, when the Chyle comes into it diſpirited, and when even a proper Medicine proves offenſive and burthenſome, and there is ſcarce

Power enough left in the Blood to maſter its Particles, and apply 'em to their proper Uſes; then, I ſay, 'tis time to make the Solids aſſiſt the Fluids in the diſpenſing of this Load which lies ſo hard upon 'em, which by gentle and cloſe Exerciſe may be more eaſily done than many imagine; beſides there may be a Diſtemper occaſion'd by Particles of a looſer Texture in the Blood, than is uſual in moſt Caſes where Nature may contend and ſtruggle with the hoſtile Particles, and yet not be able to get the Victory; where there may not be a perfect Fever, nor yet a quiet Coalition between the Blood and thoſe foreign Particles. In ſuch a Diſtemper as this it muſt needs be very proper to give a due Agitation to the Blood, to prepare thoſe Particles for the ſeveral Emunctories that are ready to re-

receive 'em: and this may be perform'd by a juſt Digeſtion, if we do but conſider how much the Body is adapted to it, and how much more Noble the Digeſtions are in the Animal Oeconomy, than thoſe produc'd by humane Contrivance. In all artificial Digeſtions the Particles which are to be ſeparated by the Agitation of the Liquor, muſt either evaporate, or ſubſide; but in the Body there are a multitude of excretory Ducts ready to receive the Particles, of ſuch a determinate Figure, as renders 'em excrementitious, and proper to be caſt off; ſo that nothing is left but what is proper to the Animal Fluids, and which the Vehemence of the Motion mixes and unites at the ſame time that it breaks and moulds the others for their proper excretory Chanels; ſo that the Agitation is in this

Caſe (as Dr. *Grew* very well expreſſes it in his Treatiſe of *Mixture*) as "*carrying the Key to and* "*fro, till it hit the Lock; or within* "*the Lock, till it hit the Wards.*" How do we know the exact Degree of Agitation, that is requiſite to unite the Particles of the Fat, which are continually flowing in a very great quantity into the Blood, with the Aqueous, by the Means of ſulphureous or ſaline Particles? Do we not frequently obſerve in ſcorbutick Perſons, who have led a ſedentary Life, that their Urines are cover'd with an oily Film of ſeveral Colours? and is it not very natural to ſuppoſe from thence, that the Blood wants a due Motion to keep thoſe oily Parts united with the others? But it is no wonder, if theſe things are not well conſider'd, when there is ſcarce any who makes Allowance

ance enough for the quantity of the fat Particles, which are continually paſſing into the Blood, which muſt needs be very great, ſeeing the whole Skin is lin'd with its Veſſels, beſides what is heap'd up about the *Omentum* and the Kidneys; ſo that Unctuous Medicines are copiouſly intruded upon the Habit of the Body when there is a great Waſting of the Fleſh, without regarding that the Blood is not able to maſter the natural *Pinguedo*, but gives it down daily, in all probability, for want of a juſt degree of Agitation or Digeſtion, to keep it ſuſpended in the Blood, and to apply it to its proper Uſes, and prepare it for its proper Veſſels.

Beſides the Power of Exerciſe on the Secretions of Particles purely Excrementitious, and the better Mixture of thoſe which

are Homogeneous; it is to be conſider'd, that there are in the Oeconomy Secretions made to return with Advantage into the Blood, out of which they are made; and the Conſideration of the Nature of theſe does afford us freſh Reaſons to ſet a Value upon the Uſe of Exerciſe, becauſe the Body is ſo fram'd and adapted, as to require it, in order to the furthering and increaſing theſe Operations; and if in the Buſineſs of Fermentation, which is only a gradual Separation of the Muſt from the Spirituous Particles of the Liquor, we find that the Motion of the Veſſels in which the Liquor fomenting is contain'd, does ſo much improve that Operation, as we are convinc'd it does, by the Effects of the Carriage by Sea on Wines and other Liquors in Casks; of how much greater Importance muſt

muſt the Motion of the Body be, in order to the perfecting the Animal Fluids, in a Syſtem of Mechaniſm ſo contriv'd, as to expect and demand ſuch an Aſſiſtance? Where the Solids are ſo fine-ſpun, as to determine the very Shape of the Particles of a Fluid; and where they are ſo diſpos'd, that a Fluid never paſſes by 'em but it carries off ſome Melioration and Improvement, and therefore cannot well arrive too frequently at thoſe Paſſages where it receives ſo happy an Alteration. Let us ſuppoſe the Blood to paſs the moſt extreme Parts twelve times in an Hour, when the Body is not mov'd; if the Motion of the Body encreaſes this to fifteen or ſixteen times in an Hour, it will neceſſarily follow, that the Quantity of the Secretions by the Liver, the Spleen, the Brain, and the reſt of the Glands,

which ſeparate the beneficial Juices, of which I am ſpeaking; the quantity of theſe, I ſay, muſt needs be augmented; which in Proceſs of Time, when this is brought to a Habit, muſt be of ſome Conſequence. To inſiſt but on one of theſe Secretions; I take it to be no Paradox, that the more a Man ſtirs himſelf, the more Animal Spirits are made in the Brain; tho' it will be ſtrait retorted, that by the very ſame Motion and Exerciſe, there will be a Waſte of the Spirits by Perſpiration, more than proportionable to the Overplus that is made in the Brain; and tho' I grant this, it will not ſuffice to diſcompenſate the Benefit which the Blood reaps from the Augmentation of the Quantity of the Animal Spirits infus'd into it (if I may ſo ſpeak) from the Brain; becauſe the true Animal

mal Spirits have their Work to do in the Blood, before they come to paſs off at the Skin; they are not of that Fugitive Make, which at firſt Thought moſt Men are apt to ſuppoſe 'em to be; they ſeem to be deſtin'd to contemperate the Acrimony of the Blood, to embrue it with a Plaſtick Quality, and may ſerve to execute other Functions, beſides that of Motion; ſo that it is not at all to be wonder'd, if a Perſon, much accuſtom'd to Exerciſes, notwithſtanding the daily Expence of a greater Perſpiration, ſhould have his Blood of a better Condition, and more Rich than that of another Perſon living a ſedentary Life, by reaſon of the greater Impreſſion, the greater Tincture (if I may be allow'd ſo to ſpeak) of this moſt exquiſite and inimitable Fluid.

Theſe

Theſe Things are not to be ſtated exactly, and yet they are not to be accounted altogether precarious; for tho' we ſhall never perhaps be able to know exactly what the Animal Spirits are, yet we may make a ſhift to diſtinguiſh what they are not. According to the common Notions, a well-prepar'd volatile Salt, after it has paſs'd the Lacteals, and comes into the Blood, might be taken to be a pure Animal Spirit; and yet, undoubtedly, the Fluid, prepar'd by the Glands of the Brain, has ſomething in it tranſcedently preferable to any thing that can be the Effect of Art. Whether thoſe Glands are ſo diſpos'd, as to unite ſome Nitro-Aerial Particles with others proper to ſerve as a Vehicle to 'em, is not to be determin'd by me or any Body elſe; but it may not be altogether ſo abſurd, to

gueſs

gueſs at ſome ſuch thing, ſince we know nothing in Nature that can afford Particles of that Elaſticity as Nitre does; and we may diſcern, that the Animal Spirits ſeem to conſiſt of a *Fulgur*, an *Impetum faciens*, ſomething that is Irraditating; and yet withal there ſeems to be ſomething extremely Mild and Plaſtick, and as it were Tenacious, combin'd with the Elaſtick. I hope I don't run into an *Hypotheſis*; I would carry this no farther than it can it be kept in Countenance by *Phænomena* ariſing in the Cure of Diſtempers; for thus we ſee in the Nervous Atrophy, tho' the Spirits, taken as *Impetum facientes*, paſs freely, and are not obſtructed, as in the Palſie, yet the Benign Plaſtick Quality ſeems to be wanting, becauſe the Habit of Body does not thrive, tho' the Spirits are brought all over it; and that the Spi-

Spirits, when they are in their true Purity, are concern'd in Nutrition, is plain enough; becauſe the intercepting of 'em, by cutting off a Nerve, always cauſes the waſting of the Part to which that Nerve leads.

Thus I have endeavour'd to ſhew ſome of the ſecret Advantages accruing to us from the frequent Uſe of Exerciſe; and by which it will appear, that the Fluids of the Body are of ſuch a Texture, as will admit of Improvement from the greateſt Rapidity of their Current, that is conſiſtent with the Organs thro' which they are convey'd.

But, *Laſtly*, to put theſe things paſt all Doubt, by a well-known Obſervation; we need but conſider what is ſometimes the Effect of too much Exerciſe upon taking

king a Purging Medicine, and that is an *Hypercatharſis*. The Particles of the Drug being ſublim'd, and render'd more active by the greater Agitation in the Body, diſplay a much greater Violence than otherwiſe they would have done in a Perſon of the ſame Conſtitution who had given himſelf to Repoſe. This has been long ago obſerv'd by *Hippocrates*, in the *fourteenth* and *fifteenth Aphoriſms* of his *fourth Section*; From whence it naturally follows, that the Motion of the Body may cauſe great Alterations in the Blood; may very much improve any Juices that are convey'd into it; and that in ſome nice Caſes, where the Alterative Phyſick is very mild, and perhaps given in too ſmall a Quantity, it is abſolutely neceſſary to have Recourſe to the Uſe of Exerciſe, to give an Energy

to

to it, that it may produce the deſired Effect.

Having thus briefly conſider'd the Power of the Uſe of Exerciſe, I come now to ſhew, after what manner it affects the Solids; and that I take to be, *firſt*, by giving a greater Tenſion to 'em, or reſtoring the true Tone of the Parts, by curing the Relaxation by which they were weakned.

That I may explain what I mean by this *Tenſion* or *Tone* of the Parts, it will be neceſſary to conſider, *firſt*, how great is the Benefit we daily receive by only changing the Poſition of our Bodies, from an Horizontal to an Erect Poſition when we quit our Beds, where in the time of Sleep the Body has been relaxed; and this will appear beſt by the ill Conſequences

quences which follow upon a Perſon's being confin'd by an Accident to keep his Bed for a few days; for ſuch a one always finds upon his getting up again, that his Spirits are diſorder'd; he finds himſelf Vertiginous in ſome meaſure, and a great deal weaker than he was, before he betook himſelf to that Poſture: From whence it evidently appears, that Standing or Sitting, the familiar Exerciſes (if I may ſo call 'em) of the moſt ſedentary Life, are abſolutely requiſite to keep up the Balance on the part of the Solids, even in a State of Health, and that more violent Exerciſes are as requiſite to recover this Balance, when ſunk by Sickneſs. I know it may be objected here, that this Obſervation is chiefly owing to the Cuſtom of changing the Poſture of the Body alternately, in ſuch a ſpace of time,

and

and that the breaking of that Cuſtom occaſions thoſe Diſorders; but this will not ſuffice; for an erect Poſition is eſſential to the well being of the Body of Man: and if the Infant was not at ſuch an Age brought to it by degrees by the Nurſe, tho' it might grow up to the Bulk of a Man, and live many Years, yet it would be a kind of bedridden Creature; Paralytick, as to the Uſe of its Limbs, tho' with the Senſe of Feeling; and much weaker internally, for want of that Advantage, which the Fluids receive from the Solids by this moſt familiar degree of Tenſion; which we experience in Standing, which Poſture has ever been eſteem'd as a Tonick Motion.

But the Stiffneſs or Strength of the ſolid Parts will appear more evident by that ſenſible encreaſe of the Strength, which Men

Men experience when they ſet themſelves upon any vigorous Exerciſe; which continues, till thro' the Greatneſs of the Perſpiration they grow tyr'd, and relax again; or, to borrow an Illuſtration from Beaſts, It will appear by what *Jockeys* obſerve, who when they deſign to take the Bearings of a Running Horſe, that is, meaſure the Extent of his Stroaks, they uſually let him gallop a Mile or more firſt, as ſuppoſing that he can't come upon his Legs (as they term it) till he has run a conſiderable time; that is, he can't ſtrike out ſo far, tho' preſs'd ever ſo much to it, upon his firſt ſetting out, as he can after he has run ſome time: which explains what I aſſert, That a proper or due degree of Exerciſe, enables the Nerves to dilate themſelves ſufficiently to take a greater Quanti-

ty of Animal Spirits, or ſome other way, to us unknown, gives 'em a better Tone, or Elater, and conſequently fits 'em for more vigorous Actions.

But to bring the Senſe of this Tenſion nearer to a Caſe of Sickneſs; Let any Man reflect, how he found himſelf after an Acute Diſtemper, wherein the ſolid Parts were mightily relax'd by the Heat of the Fever; when a Man in that Caſe riſes firſt from his ſick Bed, and makes a ſhift to walk a very little in his Chamber, tho' he quickly grows faint, and wants ſome Cordial to refreſh him; that is, Tho' his Vital Spirits ſink, as the Ancients lov'd to expreſs it, yet he perceives a certain Stiffneſs, Tenſion, or Strength in the ſolid Parts, by that firſt attempt to walk, which never leaves him, but encreaſes

creaſes daily, till he recover his perfect Health.

Theſe are ſome familiar Inſtances of the Senſe we have, after what manner we come to acquire more Strength upon the Uſe of Exerciſe, and which every Man almoſt may recollect, that he has experienc'd more or leſs in himſelf; tho' in other Caſes the ſolid Parts are always ſtrengthening by Exerciſe, without ſo plain a Senſe of it, as in the Inſtances above mention'd; as we ſee what exceſſive Strength ſome Men gradually acquire by a conſtant Practice of vehement Motions, begun when they are young, which growing upon 'em by degrees, they are not ſo ſenſible of the Encreaſe of it. This is the Caſe of Tumblers, Rope-dancers, and the like, in whom the Nervous and Solid Parts muſt be incomparably more wound up, more

tenſe than in other People; and thus we ſee the ſtrongeſt Men are often thin and Raw-bon'd, as we call it; that is, tho' daily hard Labour, and great Perſpiration carry off a great deal of the groſſer Fluids of the Body; yet are the Muſcles not Flaccid, but Tenſe and Firm, capable of greater Actions than the Muſcles of thoſe who ſeem to have a better Habit of Body; which plainly indicates, that Exerciſe does communicate ſome Strength to the Nervous Parts, which cannot be any other way procur'd; and that we may argue from the greater to the leſs; that if healthy Perſons may acquire ſuch monſtrous Strength by Uſe, People that are Valetudinary may, by ſetting themſelves upon a reſolute and diligent Practiſe of moderate Exerciſe, obtain a proportionable Increaſe of Strength.

It

It may be expected, perhaps, that I ſhould endeavour to explain, how the Fibres come to receive a greater Power to act, by being often put upon Action, and to ſhew wherein the Elater, the Spring of the Solids, does conſiſt; but this has been attempted ſo largely by an Eminent Author, Dr. *Baglivi*, and ſo much to the Diſguſt of very many, that it's better to reſt contented with plain Experience, than to frame an *Hypotheſis* for the *Modus* of of ſo abſtruſe a Method of Nature, which, in all likehyhood, Mankind will ever be ignorant of; but as far as we may reaſonably gueſs, by frequent Diſtenſion the Nerves receive a greater quantity of Animal Spirits, becauſe the Limb which is moſt us'd, grows biggeſt; and there is reaſon to induce us to ſuſpect, that

the Fibre it ſelf ſtrengthens by Uſe, has a peculiar Faculty to exert it ſelf more and more, as often as the *Imperium Voluntatis*, the *Fiat of the Will*, ſets it upon Motion. But unleſs we knew the Bond of Union, and underſtood how the Rational Soul acts upon the Animal Powers, we muſt be content to be moſt ignorant, the nearer we approach in our Diſquiſitions to that Union: but the Experimental Knowledge of theſe Parts ſufficiently reproves thoſe who hope to be deliver'd from ſome Diſtempers ſeated in the Solids, without acting ſuitably to the Nature of the Solids the Subject of their Diſtempers. As for Inſtance; Suppoſe a Perſon, by frequent and unneceſſary Uſe of the Bagnio, and more unneceſſary Bleedings; by the Uſe of hot Liquors, and a perfect Diſuſe of all Bodily Exer-

ciſe;

ciſe; by Paſſions of the Mind, and other Irregularities, is brought into the very worſt of Hyſterick Symptoms, with a Flaccidity and Relaxation of the whole Nervous Syſtem; How ridiculous is it, for ſuch a Perſon to expect to be perfectly reſtor'd to a firm Habit of Body by internal Alteratives, and Methods little different from thoſe things which occaſion'd the Diſtemper; which tho' they may give wonderful Relief in the Paroxiſm, yet can never reſtore the Tone of the Solids, which muſt be treated in a manner proper to themſelves, by Frictions, Exerciſe of the Body, the Cold Bath, and the like; which are very likely to be able to ſucceed to a perfect Cure? For why ought we not to ſuppoſe, that as all Fluids have more or leſs a Tendency to purifie and exalt themſelves by Fermentation, the So-

lids ſhould otherwiſe have a Propenſity proper to their Make, to recover themſelves by a due Tenſion? And what can be more reaſonable and natural, than to conclude, that if a Supine and Luxurious Courſe of Life has enervated the Body, an Active and Vigorous one ſhould reſtore it? If it be objected, That gentle Emeticks have gone a great way towards procuring a perfect Recovery from ſome Hyſterick Caſes; I have premis'd already, that they act upon the Fibres, and put 'em upon frequent Contractions, much after the ſame manner as a total Exerciſe of the Body; and therefore in this laſt Caſe, where the firſt Paſſages are not in Fault, their way of acting illuſtrates what I aſſert, that the Solids muſt be made to ſtrengthen themſelves, and recover their Spring by frequent Endeavours.

vours. But for Alteratives, ſtrictly taken, I think it may be juſtly a Queſtion, Whether there is that Medicine in Nature, that can remove this Diſtemper, when it has been of long continuance, tho' the World has been taught above an Age ago by *Paracelſus* and his Followers, to expect what I fear is not within the Extent of Nature; and the Impudence of Empiricks is ſo great, as to promiſe every thing that is abſurd and Romantick; which keeps People up with hopes, that they may be ſo happy as to meet with that mighty Secret, which even in the quantity of a few drops, ſhall as it were charm away the moſt troubleſome and riveted Diſtemper, and ſo inſtead of being Cur'd, they are Kill'd by Expectation; when the Power of Recovering their Health was in their own hands, if they had reſolutely ſet about the proper

per means; like the Country-Fellow in the Fable, who when his Cart ſtuck faſt in the Mire, muſt needs be calling upon *Hercules* to come and help him, when with ſetting his own Shoulders to the Wheels, he might eaſily have got clear.

But moreover, a ſecond Advantage ariſing from Exerciſe, is, that it gives the Solid and Nervous Parts a grateful Senſation, which in ſome Caſes is not contemptible; a gentle Agitation of the Spirits being able to remove ſome Pain ſituated in thoſe Parts, which perhaps nothing elſe would remove ſo ſurely and ſo ſoon. To explain the manner of this by a trivial Obſervation (if any thing in Nature can be ſo) let us conſider, how we can ſeparate the *Cuticle* from the true *Cutis* without Pain; it can't be done with

with an Inſtrument without extream Pain, it can't be done by Veſicatories without ſome Pain; but it may be done with Chafing without any Pain at all, or rather with ſome Pleaſure, till you leave off Rubbing, and the Air comes to act upon the naked Fibres. Now this can't be attributed to the Heat of the Part only, for then hot Medicines apply'd to the Skin would do it as eaſily; but muſt be ſuppos'd to be owing to a certain Agitation of the Spirits in the Extremity of the Fibres, which affects 'em with ſo agreeable a Senſation, as to ſurmount even the Pain of a Separation of their Covering, the Scarf-Skin. Now it will be allow'd by all, that whatſoever Senſation there is in the Extremity of the Fibre, the ſame there is at the Origine of it in the Brain; ſo that a pleaſant Senſation

tion in the Extremity, muſt needs be the ſame in the common *Senſorium*; and therefore 'tis eaſie to account for the good Effects of Frictions of the Limbs in ſome ſort of Fits, by giving a new and different Motion to the Spirits, and thereby diſengaging 'em from their diſorderly Motions. And then if acting thus upon the Extremity of the Fibres produces ſuch an Effect in 'em, 'tis natural to imagine, that that Motion, or gentle Concuſſion, which much after the ſame manner, in ſome proportion acts upon the whole Body of the Nerves, muſt affect 'em with a Senſation proportionably agreeable, and may prove ſufficient to diſpoſe the Spirits to leave their Diſploſions, and irregular Motions, when they happen to be ſo diſcompos'd, and conſequently remove the troubleſome Watchings

and

and painful Symptoms occaſion'd by thoſe Diſploſions, when other Means prove ineffectual. Thus we ſee how natural it is for thoſe Hyſterick Perſons, who are vexed with obſtinate Watchings, to fall into a true and refreſhing Slumber, by the Motion of a Chariot, when Opiats will have no effect upon 'em, but rather encreaſe their Watchings: The Spirits being the moſt ſtubborn Part of the Animal Oeconomy, and not always to be compel'd even by that potent Drug.

The abſtruſe Nature of this Part of the Animal Oeconomy, will not permit us to come at a fair Explication of theſe *Phænomena*, any otherwiſe, than by what we at different times experience; for we muſt firſt underſtand, as the Author of the *Diſpenſary* very well expreſſes it,

How

How the ſame Nerves are faſhion'd to ſuſtain
The greateſt Pleaſure, and the greateſt Pain. Diſpenſ. *pag.* 3.

But we may diſcern, that the very Interruption of Pain is ſome degree of Pleaſure; and that the leſſer degrees both of Pain and Pleaſure have ſomething of a Relative Nature in 'em; a Perſon that is afflicted with ſome Pain, finds ſome Alleviation of it by tumbling and toſſing in his Bed; which tumbling and toſſing, at another time, would be a ſort of Pain; and if any one thinks this ought to be imputed to Phancy, rather than Reality, I anſwer, 'Tis ſuch a Phancy as none can be free from; and the denying a Perſon, in ſuch Circumſtances, the Liberty of gratifying it, would be the greateſt Cruelty,

Cruelty, and a high Aggravation of the Pain: Beſides, in Pains of the Membranes, proceeding from the Corroſion of Sharp Humours thrown upon 'em, where the Part cannot but be very ſenſible of the Pain thoſe Particles cauſe; yet even in this Caſe, the Spirits may be interrupted or diverted from the performing ſo acutely their Office of Senſation, by being put into different Motions. I knew a hardy labouring Man, who hápning to be ſeiz'd with a violent Pain in his Hip, for two or three Nights, as ſoon as he came to Bed, kept beating his bare Hip with a Bedſtaff a great while together, before he could get any Reſt, and by that Means blunted the Pain, and tired himſelf into Sleep; (tho' afterwards he removed both the Pain and the Cauſe, by running a Packneedle himſelf thro' part

of

of his Hip); now if thus much may be done in the Membranous Parts, where the Cauſe of the Pain is *ab extra*, what may not be done in Nervous Caſes, where the Diſorders of the Spirits are the prime Occaſion of the Pains, if we can communicate to thoſe Spirits, a Motion contrary to that Motion which occaſions the Pains which certainly may be done, by moderate and agreeable Exerciſe?

From theſe Conſiderations I cannot but be induc'd to think, that in all obſtinate Pains, caus'd by the irregular Motions of the Spirits, and in the true Hyſterick Colick, one of the moſt frequent of thoſe ſort of Pains; it would be more natural, and in no wiſe abſurd, to recommend to the Patient, the Uſe of a Chaiſe, or light Calaſh, even in the Paroxyſm it ſelf, than the Fatigue of Med-

Medicines; the beſt of which, except Opiates, ſo often prove deluſive. That Exerciſe is convenient for Women, with Liberty to ſit or lie; and tho' the Motion at firſt may ſeem a little troubleſome, and the Shocks too rude; yet I think, upon what I have hinted before, there is great Reaſon to expect, that after a little Patience the Spirits would be brought to relent, and diſengage themſelves from the *Plexus's*, where they occaſion ſo great Pain. I am the more confirm'd in this Opinion, becauſe there is a Pain which ſeems more deeply rooted, even in the Tendons of the Muſcles, *viz.* the Cramp, which will frequently go off, by changing the Poſture the Part was in, when it was firſt ſeiz'd; and eſpecially by getting out of the Bed, and walking a little while, when no Preſſure or Ligature will remove it,

unleſs the Perſon riſe; by which undoubtedly the Spirits are call'd back into ſome of the ſuperiour Muſcles, or ſome way or other put into a new ſort of Motion.

This Opinion may be corroborated likewiſe by what has been experienc'd by ſome Hyſterick People, who when they have lain perhaps half a Night reſtleſs and diſturb'd, and without the leaſt Inclination to Sleep, upon getting out of their Beds, and walking a turn or two about the Room, ſhall find themſelves quite alter'd, and when they come into the Bed again, ſleep well; ſo that if ſo ſudden and ſhort an Alteration of the Poſture of the Body, can produce ſo good an Effect, much more may be expected from the Exerciſe I have above mention'd; wherein the ſick Perſon may at once enjoy the Convenience of a Cradle,

Cradle, and the Vehemence of Exercise.

I might pursue this Notion, in considering the *Scorbutick Rheumatism*; in which Case the Persons afflicted are generally strong, and able to undergo any sort of Exercise; and therefore all the sorts of Exercise which I shall hereafter mention, will agree with 'em: But it will be needless to multiply words, that Distemper being chiefly seated in the Nerves, what I have said already will serve to illustrate the Advantage, which Persons griev'd with that Distemper might receive from a resolute and prudent Use of Exercise.

I hope these Observations on the Solids, will suffice to shew the Power of Exercise on this part of our Bodies; and if any

of theſe Speculations may ſeem too nice, I would be underſtood, that I conſider 'em as brought to a Habit, as frequently and cloſely repeated; not as the Uſe of Exerciſe is generally abus'd, being frequently undertaken, but ſeldom gone thro' with. 'Tis the want of a due Notion of a Habit, which has occaſion'd the Neglect of this valuable Medium in Phyſick: Did People allow but the ſame regard to this, as they do to all other Alterative Phyſick, it would ſoon appear, how great Effects it could produce.

How ridiculous would a Man ſeem, who, when his Phyſician had recommended ſome Medicine to be taken to the quantity of a Drachm, or half a Drachm, ſhould go and take half an Ounce of it, and then exclaim againſt the Medicine, that it diſturb'd him,

him, and did him a great deal of Miſchief, and that he would never take it more: Or if inſtead of taking a moderate Quantity twice a day, for a conſiderable time, he ſhould take that moderate Quantity but once in two or three days, and then exclaim that the Medicine was ineffectual? He that ſhould act thus, would be thought to be a very unreaſonable Perſon; and yet after this manner moſt ſick People ſet upon the Uſe of Exerciſe. You ſhall have a Man ride fifteen or twenty Miles, when he ſhould ride ſeven or eight, come home very much tyr'd, reſolve never to be ſo ſerv'd again; and ſo perfectly lay aſide all hopes of any good from the more moderate Uſe of that Exerciſe: Another ſhall ride out five or ſix Miles once in two or three days, finds no great mat-

ter of Relief, deſpairs of any Succeſs from that Courſe, thinks it a trivial Thing, a meer Phancy, when the Phyſician does not know what to do, and ſo he wholly leaves off too: Now allowing moderate Exerciſe to be a Medium for the Recovering our Health, this is a very unfair way of making uſe of it; for when once a Diſtemper will not be driven out by rough Means, by Purging and Vomits, but we muſt come to Alterative Phyſick, the Work muſt go on gradually, and that Phyſick muſt be us'd without Intermiſſion. What is the difference between Aliment and a Medicament, but this? The firſt is chang'd into our Nature; the laſt changes our Nature. Now it would be as ridiculous for a Man to expect that gentle Drugs or gentle Means ſhould alter his Conſtitution, if taken with great

Intervals, as it would be for a Man to expect that the Bulk of his Body ſhould keep up or encreaſe, tho' he eat but once in two or three Days; and whatever Regard is due to internal Alterative Phyſick, the ſame is due to the moderate Uſe of Exerciſe; for if by it the Secretions are equally promoted, and the Subject-Matter of the Diſeaſe brought to deſpume ſlowly; it is highly requiſite, that theſe Means ſhould be cloſely repeated, with Moderation; that Nature may not be confounded and weakned, inſtead of being reliev'd; and without any irregular Intermiſſion, leſt the Springs ſhould run down again; leſt the Diſeaſe ſhould have time to ruine faſter than the Means of Cure can build up.

We ſee, by continual dropping, ſo ſoft a Body as water can act upon a Stone; we ſee by inceſſantly following his Blow, the Smith can bring Heat into his Bar of Iron; ſo that where the Act it ſelf, ſimply conſider'd, is weak and trivial, yet the Habit is of the greateſt Efficacy.

Neither ought this to diſcourage any, who will give themſelves leave to conſider, how ſlow, aud yet how ſure, ſome of the Deſpumations, or general Secretions of Nature are; wherein, if the Certainty and Security will compenſate for the Slowneſs of the Progreſs, they have Reaſon to acquieſce and ſubmit, when there is no other Remedy left. How often has it been obſerv'd, that in ſome Paralytick Caſes, after a conſiderable Uſe of the Hot Baths, the ſick Perſon has gone away diſconſolate, with-

without any preſent ſenſible relief, and yet found himſelf cur'd in a Month or two after; the Morbifick Matter being juſt mov'd and brought to flow, when he left off Bathing, and yet not perceptible to himſelf; and if Nature can be enabled to make ſuch real tho' ſlow, and for a time, inſenſible Advances towards Health, in a Subject half dead; may not we, with a great deal more Reaſon, expect the ſame and much more in a Perſon who has his Nerves free, the Uſe of his Limbs; and who, notwithſtanding his Decay, is able to ſet upon a Courſe of Exerciſe? If Men were not wanting to themſelves in a Reſolution to undergo with Patience, the Fatigue of Reducing Nature indiſpos'd to its former State, by ſlow Meaſures, when violent are abſolutely to be omitted; they would at laſt be really convinc'd,

that

that Health, as well as Sickneſs, may approach inſenſibly; and that their tedious Struggles, and ſeemingly fruitleſs Endeavours did gain ground upon the ſecret and intimate Springs of the Oeconomy, before they come to be ſenſible of any the leaſt Relief: for when once upon the uſe of ſuch gradual Means, there appears a ſenſible Amendment, the Point is almoſt gain'd, and the Work more than half done: As we ſee that upon the Return of the Sun, after Winter, towards us, 'tis ſome Months before the Earth ſhews any great Signs of his Influence; yet when once it diſplays the Effects of it, we can very well diſcern, that they are ſuch as muſt have been brooding long before we perceiv'd 'em. And why ſhould not ſome Diſtempers go off leiſurely, when we ſee ſo many come upon us ſo?

ſo? There ſeems to be a Parity of Reaſon for it, tho' it is no very comfortable Conſideration. We know the Poiſon of a mad Dog encreaſes in the Body for a Month or more, before it diſplays its fatal Symptoms; and there is a great deal of Reaſon to believe, that a Cancerous Humour is ſome Years ripening, before it creates any Trouble to the Perſon in whoſe Body it is bred; Why ſhould it ſeem ſtrange then, that ſome Diſeaſes require a gentle and gradual Conflict of two or three Months, when perhaps they have been a longer Time growing upon the Patient?

What I have ſaid would make the greater Impreſſion, could we but have a Hiſtory of the fatal Miſcarriages which have hapned upon prepoſterous Methods of Cure; an Hiſtory, which, I doubt, would

would prove a very Voluminous one; that Raſhneſs being too uſual in both Acute and Chronical caſes; In the firſt, Many are apt to force an Indication, rather than wait for one. In the latter, The World abounds with Examples of the Folly and Impatience of Mankind. To inſtance but in the Dropſie; Who is there almoſt, who cannot furniſh you with the Story of one, who, from a hopeful Condition in the uſe of Diureticks, and Corroborative Things, caſt himſelf into the Grave, by violent Purgatives, recommended by ſome compaſſionate Friend or other, to carry off the Waters at once, with the Beadroll of Stories to vouch its Succeſs; when the other Method, with a little Patience, had certainly brought him to his former Health, and perhaps in much leſs time than his Diſeaſe was contracted.

So

So difficult it is for unhappy Man to bear the Penalty of ſome Months, for the Demerits of ſome Years; and by Manly Conſideration to keep from entangling himſelf in his Chain, inſtead of getting out of it.

I am not unaware here, how hard it is to frame Arguments that can have Force enough to prevail againſt the Apprehenſions of the Pain and Trouble to be undergone in the firſt Attempt of Exerciſe, which moſt ſick People have conceiv'd; and which are oftentimes ſo ſtrong, as to blind the Mind, or bribe the Will; and there is no way to deal with thoſe People, but by Precedents; by ſhewing 'em, that thoſe Difficulties have in many Caſes been eaſily overcome: And here the Cold Bath offers it ſelf, a ſevere Method of Cure taken up lately among

among us, and which upon the firſt Conſideration carries Terrour enough in it; which if any one had preſum'd to recommend ſome Years ago, he would have been thought one of the moſt Wild and Barbarous of Men; and yet we ſee now the tendereſt of the fair Sex dares commit her ſelf to that terrible Element; and upon the firſt Experiment the Fears and Amuſements vaniſh. How ſevere is the Sickneſs upon a Man's firſt going to Sea; equal ſeemingly to the Effects of any ſtrong Poiſon; and yet Nature ſoon accuſtoms her ſelf to that Motion which is the Cauſe of it, and the Sailor quickly grows well! And here it muſt not be ſuppos'd, that any ſalt Vapours ariſing from the Sun, do contribute to this Vomiting, for it is now well known to every one, who had but the leaſt ſmattering in Diſtil-

lations,

lations, That Salt will not riſe with a much greater Heat than that of the Sun; beſides it is obſervable that the oldeſt or moſt accuſtomed Sailors ſhall Vomit in bad Weather, when the Ship is put into an unuſual and irregular Motion; ſo that it is plain, that the Motion of the Ship is the only cauſe of that Sea-ſickneſs: if therefore Nature can ſo ſoon ſuit her ſelf to a Motion that can cauſe ſuch terrible Symptoms, how unreaſonable, how Childiſh it is for any one to object againſt the Uſe of Exercife, becauſe of the common and (in compariſon of Sea-ſickneſs) trivial inconveniences which muſt be born in the firſt Tryals! Some ſtrong People ſhall be confounded with a very few Glaſſes of Wine; and yet if thoſe very People fall to keeping of Company, and addict themſelves to Wine

Wine but a little while, they ſhall drink vaſt quantities without any Diſorder. The firſt Pipe of Tobacco diſturbs Nature to the utmoſt, but after two or three more, ſhe become pleas'd with that, which before diſturb'd her. In the Animal Oeconomy, every thing is ſo wonderful contriv'd, and made to conſpire for the Preſervation of Life, that Nature can adapt her ſelf to all Circumſtances; ſhe can expand her ſelf to bear the Luxury of a Palace, and contract her ſelf to the ſhort Allowance, the Bread and Water of a Priſon; ſhe can be eaſie under a Bloated Habit of Body, and ſhe can make a ſhift to ſuit her ſelf to the Expence of Fluxes and other Evacuations; accuſtoming her ſelf ſo to bear 'em, that the longer they laſt, they may be in ſome Proportion the more familiar. But above all, ſhe, with the moſt Eaſe, accuſtoms

accuſtoms her ſelf to the Uſe of Exerciſe; ſhe may be ſaid to delight her ſelf in that, it being in a manner, *de Eſſentiâ Naturæ*, and therefore it is in vain, when Exerciſe is really neceſſary, for a Perſon to complain after the firſt Tryal, and ſay, I'm tyr'd, my Bones are ſore, my Head akes, I'm ready to faint, or the like; for all this muſt be endur'd, and upon patiently repeating the Motion, tho' no Abatement appear for ſome Days, yet the Reward will come at laſt: and as theſe Symptoms go off, the ſtrength of the ſick Perſon will encreaſe.

From theſe Conſiderations I think it ſufficiently appears, that what I have before hinted, is not at all unlikely, *viz.* That in ſome Caſes, a diſtemper'd Perſon may acquire, by ſuitable Exerciſe habitually us'd, a degree of Strength,

as much greater, than that of other ſick People in the ſame Circumſtances, who wholly neglect all Exerciſe, as the Strength and Agility of Robuſt Men, bred up to Violent Motions, is greater than the Strength of other People, who tho' Healthy, yet are not us'd to ſuch Things, and therefore incomparably Weaker.

Having thus Explain'd the Power of Motion, both on the Solids and Fluids, and having ſhew'd how neceſſary it is, that ſuch Motion or Exerciſe ſhould be continued to a Habit, that it may be render'd ſufficient to procure thoſe Ends it is directed to; I hope after theſe Conſiderations, it will appear pretty plain, that Exerciſe may deſerve to be taken as a *common Aid* to Phyſick, (to uſe the Term which *Aſclepiades* gave it) and 'tis under that Notion,

tion, that I propoſe it as ſo Beneficial a Medium in the Art of Curing; ſo that Exerciſe in this Sence is to Phyſick, as Bandage is to Surgery, an Aſſiſtance or Medium, without which, many other Adminiſtrations, tho' ever ſo Noble, will not ſucced. It is a kind of Reſerve, but yet of that Efficacy, that the thing you moſt depend upon, and tho' in it ſelf very powerful, may yet receive its *Derniere Puiſſance* from this Reſerve. And to this it is that we moſt undoubtedly attribute the wonderful Succeſs which the Ancients had in their Curing with ſuch indifferent Materials, as their Pharmacy afforded 'em.

This will prove an Aid in a double Reſpect, *viz.* both of the Diſtemper, and of the Medicine.

In Reſpect of the Medicine; It is to be conſider'd, that ſome Medicines may require it, to enhance their Virtue; others to remove ſome Inconvenience attending their Operation, which may deter People from uſing 'em ſo liberally as they ought to do.

As to the Former, the ordinary Circulation of the Blood, may not ſuffice to Anſwer the Nature of ſome Medicaments, and call out their utmoſt Efficacy; juſt as we ſee the heat of our Sun will cheriſh and keep alive ſome Exotick Plants, but yet will not ſuffice to bring 'em to their utmoſt Perfection, to flower and ſeed; ſo that Exerciſe in this Caſe, is like the juſt and exact Incubation to the Egg; that which Animates the Drug, and gives it a Power to produce the Effect it

is

is directed to. A Medicine may not avail any more without Exercise, than Exercise without a Medicine, and yet when both are us'd together, there may be a Result from that Union, of the greatest Importance.

Therefore, before I come to speak of the Distempers, most liable to the Power of Exercise, I shall take Notice of two or three Remedies, which seem to demand this sort of Assistance.

The First, is the Decoctions of Woods: it is the general Complaint of those who take these for any Time, that they pall their Stomachs; to obviate which, if it be requisite that a Person should persist in this Course, nothing can be more proper than Riding, or some other gentle Exercise, because it will keep up the

Vigour of the Spirits; and how much the Appetite depends upon that, is eaſie to imagine, beſides that the Intention, the *Diaphoreſis*, is likewiſe promoted thereby.

Another Medicine which ſhould be followed with Exerciſe, is the Chalybeate, eſpecially in Dropical Subjects; not for fear it ſhould lie heavy upon the Stomach, as the Vulgar think, but becauſe in theſe People, the Contents of the Stomach are much rarefi'd and flatulent, and the Steel is apt to cauſe Diſtenſions and Gripes, and other troubleſome Symptoms; ſo that it is neceſſary, the whole Body ſhould be well warm'd, that thoſe Particles may be diſcuſs'd, and the Stomach qualifi'd to bear the Chalybeate; beſides, that acquired Heat will enable it, after it comes into the Blood, to diſplay its Effects the ſooner, either

ther as a Corroborative, or a Diuretick. In Hyſterick and Hypochondriacal Perſons, this Medicine, gives trouble after another manner, by Coſtiveneſs, by Headach, and Heating the whole Body too much; now all theſe are much qualifi'd by Exerciſe, for it will procure a Ventilation of many of thoſe Particles, which the Medicine agitates and throws upon the Membranes.

I might proceed to enquire into the Nature of *Balſamicks*, but that I ſhall have occaſion, as I proceed, rather to ſay ſomething a gainſt their Uſe, in one of the Diſtempers, which I ſhall conſider; but if they are to be us'd, what I have already ſaid in Relation to the Fluids, will ſhew that a great deal depends upon a proper degree of Agitation in the Blood, for the uniting and throughly

mixing the Particles, of a Medicine of this Nature, that it may be tranſmitted to the deſigned Part to ſome Purpoſe; and as it would be convenient a Balſamick ſhould be taken in a larger quantity, if the Stomach of ſick People could bear it; ſo during the Time of Exerciſe, while the Body is heated, the Stomach can bear a greater quantity than at other times, without any Senſe of Irritation, or Inclination to throw it up. But I ſhall forbear to enlarge any more on theſe things, and go on to the Diſtempers, which ſeem moſt Naturally to demand this kind of Aſſiſtance; in Treating of which it will be eaſie to diſcern in every ſeveral Caſe, how the Gymnaſtick Part will agree, or fall in with the Pharmaceutick.

OF

OF THE

CONSUMPTION.

THE Firſt of the Diſtempers then, is the *Conſumption of the Lungs*; I take this to fall under the Power of Exerciſe; for theſe two Reaſons.

Firſt, Becauſe the Morbifick Particles, which are the immediate Cauſe of the Diſeaſe, ſeem to be of a looſer Texture, to be leſs intimately combin'd in the Blood, than in moſt Chronical Caſes, the Particles which occaſion

ſion each Diſtemperature ſeem to be.

Secondly, Becauſe this Caſe requires the carrying off the Acrimonious Particles, by equal Secretions, rather than by any one particular Emunctory of the Body.

The *Firſt* Reaſon ſeems to appear manifeſt enough, from the habitual Heat and Diſturbance, which are generally complain'd of, ſometimes even upon the firſt Breaking out of the Cough, and from the continual Quickneſs of the Pulſe; all which ſhew, that there is an imperfect ſtruggle of Nature, frequent and partial Ebullitions, which don't ariſe to a degree ſufficient to clear Nature of that which oppreſſes her; but yet plainly indicate, that the hoſtile Particles do not unite, or accord with

with the Blood, ſo much as the Particles of each Diſeaſe do in other Caſes; as for Inſtance, in Scrophulous and even in Cancerous Caſes, tho' the Blood is loaded with ſo pernicious and even corroſive a Humour, yet we find no Diſorder in the Beat of the *Artery*, no irregular Heats, but for ſome Reaſons or other, in the make of their Particles, they paſs better with the Blood, and the Diſeaſe is longer protracted; now I think it ſeems to be a Natural Conſequence, that where there is an Ebullition or Contention of Particles, there is no Union; and that a more general and natural Heat, ſuperinduc'd by Exerciſe, by the Solids acting uniformly upon the Fluids, may produce a Ventilation of many of thoſe Particles, which Nature contends ſo much with.

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The *Second* Reaſon, *viz.* The Neceſſity of equal Secretion, is occaſion'd by the Effects of this Hectical Diſpoſition, which by bringing a Languor upon the Spirits, a Relaxation or Flaccidity of the Muſcular Parts, and even of the Lungs it ſelf, renders Nature unable to bear any particular Secretion without great Diſturbance: Thus we ſee upon the uſe of the gentleſt Purging Medicine, the Cough is encreas'd, and the whole Body for a Time, more than ordinarily diſturb'd; the ſame happens upon the Uſe of *Sudorificks*, and indeed ſcarce any particular Secretion can be conſiderably enforc'd, without ſome Inconvenience following upon it; ſo that it muſt needs be the moſt proper Method, if we can attain to it, to enable Nature to do the Work her ſelf, by gentle and even Deſpumation, of

the

the acrimonious Particles, at all the Emunctories.

To procure this good Effect I propoſe the firſt of thoſe Exerciſes, which I ſhall conſider more amply in its proper Place, which is Moderate Riding. This Exerciſe is undoubtedly the moſt likely to cauſe an equal Exaltation of the Fluids, to reſtore the Tone, and Elaſticity of the Ducts, ſo that the hot fretting Particles may be caſt off; ſome of 'em by inſenſible Perſpiration at the Skin, others by the Kidneys, others by the many *Salival* Glands, others by the Glands of the *Inteſtines*, where the very acrimonious Particles, forc'd out by that Exerciſe, which in a ſpecial manner acts upon thoſe Parts, may be very much alter'd while they lie in the *Inteſtine*, undergo a ſort of *Cohobation*, and in all likelyhood may

may ſome of 'em become inflammable, and ſo diſpos'd, as to prove Nutritious, when ſuck'd up into the Blood, as ſome of the Contents of the Inteſtines always are. This is communicating, *ab extra*, a Power to Nature to act upon her ſelf; which muſt needs be more agreeable than to put a Force upon her, when ſhe is Languid, and not able to maſter both the Drug and the Diſtemper.

It would be of great Conſequence, to People Afflicted with this Diſtemper, if they would be brought to conſider ſeriouſly the Diſtinction of the Oeconomy into the Parts containing, and the Parts contain'd, that is the Solids and Fluids, and the happineſs of being able to Exert the Strength of the Solids, and make the Muſcular and Nervous Parts aſſiſt the Blood and Spirits. There

are

are Diſtempers wherein a Man is ſo Unhappy, as to have one Part of himſelf only Paſſive; as in Fevers, the Intenſeneſs of the Heat, affects the Spirits and Nerves to that Degree, that all Power of Standing or Going is taken away. In a Palſey, the Hopes lie all in the Fluids or Liquor Contain'd: In other Caſes, the larger Glands are ſo much alter'd in themſelves, that the Motion of the Body would be to no Purpoſe; but here in this Diſtemper, we are Treating of, the Caſe is quite otherwiſe, if the Sick Perſon will but Entertain a Reſolution to help himſelf, will employ all the Springs and Fibres of his Body, and by that means take the Labouring Oar from lying always on the Blood alone, he will have no Reaſon to deſpair.

Thus

Thus I have conſider'd how the Uſe of Moderate Riding will conduce to the conveying off the Subject matter of the Diſeaſe. The next Indication is the Strengthning the Tone of the Lungs and Muſcular Parts, which in this Diſtemper grew Flaccid, I might add of the Stomach too, but that we can help that Bowel by many excellent Internal Remedies. Now I would fain know of any Man, how we can reach the Flaccidity of the Lungs, by Internal means, till the Diſtemperature of the Blood is remov'd, when it will go off in Courſe, but would be done much ſooner, if we aſſiſted both the Solids and Fluids at the ſame time; now that the very Lungs it ſelf may appear, not to be out of the reach of a Habit of Exerciſe, let any one conſider the ſtrength of that Part, which Divers acquire by frequent Diving;

ving; or to come nearer to our Purpoſe, take any two Men equally, us'd to Hard Labour, of equal ſtrength as near as we can gueſs whereof one has accuſtom'd himſelf to Running, the other never done ſo, all the World knows that the Practis'd Footman ſhall Run a great deal farther, and much faſter than the other can do: Tho' in the Common Senſe of the Expreſſion, this latter has a Clear Wind as we ſay, and is in perfect Health; which invincibly proves, that the Lungs, tho' a Bowel, are capable of a Habit, and that with a Proportional Allowance, the gentle, eaſie Exerciſe, of Riding, muſt introduce a New Habit, into the Lungs of a Conſumptive Perſon, and ſo recover the Tone of that Bowel.

I know it will be reply'd here, that *Balſamick* and healing Medi-

cines are ſuppos'd to ſtrengthen the Parts they are directed to, that they are generous Medicines, of fine Parts, and conſequently fitted to Communicate a firmneſs, a Spring to the Nervous and Membranous Parts of the Lungs; and if it could be prov'd that they did Heal ſo much as they have been pretended to do; I would readily allow they did Strengthen thoſe Parts, but I have had ſome conſiderable Opportunity, to obſerve the Uſe of thoſe Medicines, and I never could find that if Alteratives fail'd, Balſamicks would do any great good; that is, taken ſtrictly as Balſamicks, upon a Healing Intention. I doubt not, but in the beginning of the Diſtemper, as Alteratives they may be of Service, eſpecially the milder ſort; by the pleaſant ſenſation they Create, and the Conſent of the

Parts they will give preſent Abatement of the Cough, and when brought into the Blood, may by Promoting a *Diuriſis*, or by precipitating ſome of the Acrimony, help to carry off the Cauſe of the Cough, after the Alterative way, but that when there is any Ulceration in the Lungs, and the Blood is loaded with Hot and fretting Particles, they ſhould then heal ſo much, I cannot conceive. If we will but give our ſelves leave to examine a little cloſely how they act, when externally apply'd to a Sore, we ſhall not perhaps find, that they are all of 'em ſuch immediate Healers; ſome of 'em are too fine and Stimulating to be us'd as Eupoloticks, but rather prove Digeſtives, and therefore muſt be more likely to cauſe a too great Agitation in the Blood of theſe People, than a healing of the Ulcer; I know it

may be here reply'd; that they are very proper to cleanſe the Ulcerated Parts of the Lungs in order to their better healing; but I can't imagine how it ſhould come about, that there ſhould be ſuch great need of cleanſing the *Ulcuſcula* in a Part of ſo Spongy and Membranous a Subſtance as the Lungs, where there can be no redundancy of Parenchymatous Juices to feed the Ulcers; beſides it is to be conſider'd, that the conſtant Motion of the Lungs, will help to deterge the Ulcerated Part, juſt as if we ſhould ſuppoſe a Man, that has an Ulcer in his Leg, ſhould be ſqueezing the Lips of it together all day long, we can't doubt but he would by that means work out the *Pus*, the Slough, and all the miſpurities of the Sore, and in like manner, the Heaving and Subſiding of the Lungs will hin-

der any thing from Bedding or Loding it ſelf long in a Part that is really Ulcerated. And alas! here is the grand difficulty in a way to a Cure, we can't eaſily bring ſo arid a Subſtance, as that of the Lungs to unite, when lacerated, becauſe of its continual Motion; ſo that there is all the reaſon in the World, for us to heap in only healing Medicines, ſtrictly taken, without any thing that may prove in the leaſt ſtimulating. Therefore, wherever Balſamicks have done any great good; I cannot think it has been any other way than by deriving of the Acrimony from the Blood, and not by immediately healing the Part affected; ſo that tho' theſe are Noble Medicines in Colicks and Simple Affects of the Stomach, where the State of the Blood is quite different, yet here they are too Generous. They

are like the Sword of a Gyant, in the Hands of a Dwarf, that will not help but Oppreſs. And as for the Oily Medicines, which may be call'd a ſort of milder and Artificial *Balſamicks*, we ought to conſider, that the Blood is Repleniſh'd with a better Oyl than any we can immediately ſupply it with; I mean the Fat, which to the quantity of a Pint at leaſt is continually paſſing, into, and out of the Blood: And yet in this Ill Habit of Body it waſts daily, and does not Unite with the other Fluids as in a ſtate of Health. What then can we do by the Poor Addition of a few Drachms of Unctuous Stuff, which after it has paſs'd the Stomach enters the Blood, to the quantity of a few Grains, and does not the leaſt good, in Reparation for the unpleaſantneſs in the Taking, and the Uneaſineſs it ſometimes cauſes

in the Stomach of the Sick Perſon?

I hope theſe Reflections will not be miſinterpreted, as if I endeavour'd after ſome little Hypothetical Notion as a wedge to make way for any Deſign of mine; they will appear but too real to any that have been Converſant with this Diſtemper. I could wiſh it was all Hypotheſis and Fiction, and that theſe Medicines would perform all that is expected from 'em, but then, to what muſt we attribute the Ravage this Diſeaſe makes, which is known to all, to be a Melancholy Truth? Not to the want of *Balſamicks* certainly, for both Poor and Rich, can make a ſhift to procure enough of 'em. The Lozenge and Linctus are in every Bodies hand, but this muſt be attributed to their leading People, to take a wrong Aim, to level at the

Symptom inſtead of the Diſeaſe, theſe ſpecious Medicines induce 'em to be intent on the Cure of that, which is moſt Troubleſome, *viz.* the Cough, when they ſhould lay the Ax to the Root of the Tree, be more intent on the Cure of the Habit of Body, and not let it be over-run with a Poiſonous Acrimony. I am confident Legions of the Dead might have been above Ground, if they had but conceiv'd the Fallacy of theſe means, if they had but ſtuck cloſe to the proper Quantities of any one good Alterative, they might have Plung'd out of their ſeveral Maladies; but by placing all their Hopes in things directed to the Cough, they have far'd like the Dog, which bites at the Stone that is thrown at him, inſtead of Biting him which threw it, not knowing that ſuch diligent plying of theſe Medicines

is a kind of Embalming a Man before his Death, and an Ill boding Preſage that in a little time, he will be in a Condition to be Enbalmed after it.

From what I have ſaid it is plain, that I take the Negative way (if I may ſo Speak) of Curing this Diſeaſe, to be the moſt rely'd on, that is, the deriving the Acrimony, which cauſes the Cough and other Symptoms to the ſeveral Excretory Channels, and clearing the Blood of it; for the Blood when freed from ſuch Acrid Particles will prove the beſt of Balſams it ſelf. Therefore the milder Antiſcorbuticks, the Bitters, Decoctions of Woods, and even the milder Balſams, do all contribute their Aſſiſtance upon this Intention, in the firſt State of this Diſeaſe, and do very often ſecure the Perſon

that

that makes uſe of 'em, and when they have not prevail'd alone, if the Uſe of Exerciſe had been ſuperadded to 'em, they would undoubtedly at that time have been render'd effectual. But yet I am not ſo bound up in an Opinion, but that I am convinc'd there is ſuch a thing, as a poſitive relief in this Caſe, in the ſtrict Senſe of the Expreſſion; that is, a Healing of the part fretted or Ulcerated, but then I believe, it muſt be done by things of a milder Nature, than our Common *Balſamicks*. The Waters of our Hot Bath, are able to do a great deal, by the Healing Ocres in which they abound, and there are other things which ſeem qualifi'd for this end; But that Qualification neceſſarily ſuppoſing they ſhould be extreamly Mild and Temperate, and upon the account of that Temper, it being likewiſe poſſi-

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ble they may ſometimes miſs taking Effect; it is theſe Conſiderations, have induc'd me to apply the Aſſiſtance of Exerciſe to the Temperament of thoſe Medicines, that by ſuch means they may be render'd able, always to Anſwer Expectation. But that both the Nature of the Medicine, and the Aſſiſtance of the Exerciſe may appear the clearer, it will not be amiſs to conſider two or three of theſe Medicines.

The firſt of 'em is a vegetable which has always been accounted a Pectoral; but after the Rate we uſe it, I much queſtion whether it may not be ſaid to be wholly indifferent; this is *Colts-foot*, a Plant ſeemingly dry, and little likely to effect what I have known it do.

I ſhall here venture to give a Relation of ſome of the ſtrange

Effects

Effects of it, which are ſo ſeemingly incredible, that if I had not full Aſſurance of the Fact, I ſhould not offer it, and tho' it is not of a Cure of the ſame Diſtemper, which I am treating of, yet I hope it will not be thought a Digreſſion, becauſe the Obſtinacy of the Humour, which is the cauſe of that Diſeaſe, which this Herb did remove, is ſo much greater than in the Caſe I am upon, that it may ſerve to give us Reaſon to expect great Relief from it, in the Cure of the Conſumption likewiſe, to which it has always been apply'd, if us'd after the ſame manner, and in the ſame quantity, as it was in that Caſe, it was therefore a Scrophulous Subject that it reliev'd, but one ſo Deplorable, that the Hoſpitals can't often ſhew the like. The Young Gentlewoman had above twelve Sores upon her, ſhe had

had

had the Regular help of Phyſicians, but was left off as incurable, when a Perſon who was no Phyſician, and did not pretend to any thing like dealing in Medicines, only he had reaſon to know the neglected Virtues of this Plant, came accidentally to the Houſe, when the Gentlewoman's Mother was Lamenting her Daughter's Condition; after having given her Reaſon, to expect ſomething from his Medicine, he promis'd to make it for her, but made her ſend 10 Miles, twice a Week to his houſe for the Decoction of the Herb, that he might conceal it from 'em, becauſe he knew they would undoubtedly deſpiſe it, if they knew what it was: He therefore made very ſtrong Decoctions of it, till the Liquor was Glutinous and Sweetiſh, of which ſhe was to Drink as much as ſhe could every day at what times ſhe

pleaſed, this ſhe followed above four Months; in which time moſt of her Sores were dry'd up, and in a little time more, ſhe was perfectly Cur'd. And of this I have reaſon to be certain, becauſe I liv'd in the Houſe where it was made, all the time, and the Perſon who made it, did not make a Secret of it for Gain, but only that it might not be ſlighted. This inſtance I have thus amply related, that it may ſerve as a hint that this Herb when it is us'd as a Pectoral, ought to be us'd after another manner than we generally do. And that when we do make uſe of Vegetables, in a manner ſuitable to their Nature; we may find Cauſe to come to a Temper, as to our Opinions concerning 'em, notwithſtanding the great Plenty of generous Medicines, which Chymiſtry affords us. I have caus'd the Decoction

of

of this Herb to be made after the ſame manner, and have given it where I did not expect a Cure, and thought that I had reaſon to believe, it did in ſome Meaſure prove Nutritive. And we find by *Reuſner* in his Obſervations publiſh'd by *Velſchius*, that it has been us'd as an Analeptick, he tells us that *Hillerus*, the Marquiſs of *Brandenburgh*'s Phyſician, did reſtore Children out of *Atrophy*'s, by making 'em eat of this Herb fry'd after the manner of Clary.

The next thing I ſhall take Notice of, as peculiarly adapted to this Caſe is *Liquorice*. This Plant was ever reputed by the Ancients for the greateſt quencher of Thirſt in Nature, and therefore they call'd it *Adipſon*, and upon that account, *Galen* tells us it was given to Dropſical People, *Theophraſtus*

phraſtus calls it *Scythica*, and *Pliny* gives us the Reaſon of it, and tells us the *Scythians* were wont to Live 12 Days upon *Liquorice*, and a little Cheeſe made of Mare's Milk; ſo that it was in Reputation, likewiſe for ſuſtaining Nature, and enabling People to bear Hunger. Its effects on Pains in the Stomach, the Bladder and the like, are numerous; and ſome of 'em very well atteſted, and perhaps there is ſcarce any Alterative that the Ancients take more Notice of than this, except their admir'd *Silphium*; and we may gather from all, that it is one of the greateſt Correcters of Acrimony in general, and that it is very temperate and ſafe, becauſe the Juice of it has been drank in conſiderable quantities, and that fermented too; after this account of it, let us ſee how we uſe it; we boil about an Ounce

or

or an Ounce and a half, in a Decoction of a Quart or two with other Ingredients; this is a wonderful Conceſſion, but then in our Lozenges, there we do it to ſome purpoſe, about equal Parts of Juice of *Liquorice* and *Sugar*, make up a Stupendious Medicine indeed, not remembring at the ſame time a good Remark of *Tragus*'s, *viz.* that *Sugar* and *Liquorice* are directly contrary, he Glories, ſpeaking of *Liquorice*, that we have found a Sweet, that will quench the Thirſt, whereas moſt other Sweets will cauſe Thirſt, and inſtances in *Sugar*, which if it be true, can any thing imply more of Contradiction than our Practice? If we were to make Sweetmeats for Children only, it would be allowable to mix all the Sweets in the Univerſe together; but when the Blood of a Poor Conſumptive

Wretch, is heated and loaded with Acrimony, to ſpoil the moſt agreeable Drug in Nature, by mixing it with its contrary, only becauſe the form of a Medicine requires it; this, with all Submiſſion, is what I think cannot eaſily be excus'd; this is to Cheat People with the *Bellaria* of Phyſick, and Tickle Men into the Grave.

I know what will here be the Objection, *viz.* that theſe things are deſign'd only for the Cough, and not expected to Cure the Habit of the Body, and that therefore they may be allow'd to be a good ſort of Compoſition for that Palliative Service they are directed to; but this will not ſuffice, for there is not one in ten that makes uſe of theſe Medicines, but relies on 'em for the Cure of the whole Diſtemper; and therefore this is the broken Reed that has deceiv'd ſo many; eſpe-

eſpecially of the Poorer Sort, and which leads 'em in ſuch numbers into the Hoſpitals to end their Days there, after they have loſt the Opportunities of Recovery by depending on theſe Trifles. And if any one muſt needs take offence at ſome of theſe Expreſſions, let him conſult *Ludovicus*, an allow'd Judge of theſe matters, in his *Pharmacia Moderno ſeculo applicanda*, he will find what is his Opinion of theſe things in the 19th *Page* of his *firſt Diſſertation*, ſpeaking of the *Confectiones communes & Candiſatæ, Conſervæ recentiorum ſiccæ (ſimplicis ſui Pulvere plerumque debiliores) Martis Panes, Pandaleon, & antiquariæ Saponeæ Confecturæq; reliquæ*, he ſays, *Væ Hecticis tabidiſq; quando tandem ad ejuſcemodi Refectiva, ſeſamo atque papavere ſparſa, pineis, Piſtaceis*, &c. *damnantur: Arentes hinc fauces (quamvis difficulter interdum)*

lenitas vidimus, curatum neminem, quin potius intenſiores inde depaſcentes febres, dejectum magis appetitum, feſtinatoſque Fluxus colliquativos. And ſpeaking before, *pag.* 9. of *Decoctions* and *Infuſions*, he ſays, *Pro certis interdum Circumſtantiis in Pectoralibus & Vulneraris dilutiora hæc contractioribus doſibus commodiora deprehenduntur*; and, it ſeems, he thinks this Obſervation, relating to the Uſe of *Pectorals*, to be of ſuch Moment, that he makes it one of the Heads of his *Additionary Comment* or *Appendix*, where, *pag.* 582. he has theſe Words; *Natura interea nihilomnius præ Eſſentiis Extractiſq; pectoralibus, præq; fauces in internis ibi ardoribus tantiſper lenientibus Morſulis, Trochiſcis atque mixturis antihecticis, antiphthiſicis, diffuſius quidpiam & ad remotiora perveniens una ut plurimum velle videtur.*

Theſe

Theſe Citations plainly ſhew, that he thought thoſe Sugar'd Compoſitions no appoſite Remedy for Perſons in ſuch Circumſtances, but that whatever Remedy is made uſe of, it ought to be made to dilute as much as poſſible; which does agree with the Reaſon, which I ſhall ſhew anon, for the plentiful uſe of thoſe mild Vegetables. I have made theſe Citations at large, that what I have ſaid may not be thought to be any Figment of mine, but that it may appear, that I have Precedent as well as Reaſon on my Side. But to return to the Root I was upon— Beſides the mixing of Sugar with Liquorice, to what purpoſe is the Aqueous Part of its Juice exhal'd? what harm would that ſoft *Lympha* do to People, who have a continual Thirſt upon 'em? To what purpoſe muſt the

Juice be inſpiſſated, in order to acquire an Acrimony by lying, not to ſpeak of its Adulterations? Theſe are things which I could not forbear animadverting upon, becauſe they put us out of the right uſe of a Medicine, than which there is not perhaps a greater *Analeptick* to be found, if it were taken in the ſame quantity as other Juices are taken. A Medicine that is a kind of a Balſam *in Ficri*, and the moſt likely to be wrought up to Perfection in the Blood, and of which the Freſh Juice ought undoubtedly be taken to a Spoonful or two ſeveral times a day. But thus it is, we give a thing the Name of Phyſick, and then ſtand aghaſt at it, and take it with Guard and Circumſpection, as if it were not poſſible that any thing ſhould prove a Medicine, and yet be taken in an Alimentary way.

There

There is another Plant, the *Cynogloſs*, which ſeems not unlikely to be of Uſe in this Caſe, becauſe it ſeems to have ſomething of a like Gleamy Subſtance in it; it has been deliver'd down to us under ſome miſtaken Notions, as if it cauſed Sleep, which perhaps have been occaſion'd by its Cooling and Styptick Quality; but a late Author of unqueſtion'd Judgment and Experience has us'd it pretty much in Decoctions with *Turnips*, and ſays, it has no ſuch quality, but recommends it to People in this Diſtemper; to theſe may be added ſome of our Vulneraries, of which there is great Variety of all Rates, of all degrees of heat; and among 'em one of the Temperate ſort, never enough to be valu'd, *viz.* the *Comfreys*, and which in Conſumptions, upon ſpitting of Blood, may be expected to do great

things; Theſe Roots may be ſo manag'd by a good hand as to be eat as Food. The Female Retailers of Phyſick would perhaps take it Ill, if among theſe things I ſhould forget their Preparations of *Turnips* and *Snails*, which may all have their time of being ſerviceable, either as Food or for Variety, and what is more, all theſe things are Compatible with a Milk Diet too; theſe things may be taken in ſmall quantities at different times from the taking of the Milk; tho' if taken with it, they could cauſe no Coagulation, and ſo a mild and Medicated Chyle may be continually paſſing into the Blood to the great Advantage of the Sick.

Theſe Inſtances are ſufficient to ſhew the Nature of thoſe things, which I take to be the moſt adequate Remedy in this Caſe; *viz.* that

that they ought to be ſuch as are of a Medium, between common *Balſamicks* and *Acids*, and that they are ſuch, as ſeem moſt likely to prove Nutritive to People in ſo weak a Condition; the reaſon why I ſet ſuch a value upon theſe moderate things, is taken from the ſtate of the Blood of People in ſuch Circumſtances, which ſeems unable to manage ſtronger Medicines, the leaſt tendency to a *Diaphoreſis* being ſome diſturbance to thoſe Perſons; ſo that what is to be done, muſt be by things which may ſuit with the Blood, and as it were grow upon it, that may be tranſubſtantiated into its *Craſis* after an Alimentary way; there muſt be a continual Rill of theſe temperate Juices into the Blood, without the obſerving of Phyſical Hours, and then 'tis to be hop'd the Blood may renew by degrees, and the Acrimony may decreaſe

decreaſe for want of Fuel; and thus we may perhaps better obviate the Periodical Ebullitions of the Hectick, by ſubſtracting their Cauſe, than by ſtifling the Hectick by keeping in the Cauſe; I have not Scope here to explain my ſelf, but I think the common Cauſes aſſign'd for thoſe Fits, don't ſeem ſufficient; I can't think the Ripening of a Tubercle able to do ſo much, that little quantity of *Pus* can't contain a *Putredo* ſufficient for ſuch effects, not to ſay the ſame Hectick happens, where no Tubercle has broke; to be ſhort, it ſeems to me moſt probable, that when the Blood is ſo much ſaturated with diſagreeable Particles, as in Conſumptive Perſons it is, as theſe Particles encreaſe and grow upon thoſe Particles which make up the Proper, Genuine, Inſeparable Eſſence of the Blood in its true State; I ſay as the firſt gain ground, there

there is ſo great a Correſpondence and Harmony in the Oeconomy, that theſe latter muſt contend and reſiſt the other, tho' in the Contention, Nature gains no great Advantage, but only fights and retires till ſhe is quite overcome; this ſeems to me no unlikely Idea of the Hectick, and if it be true, the beſt way muſt be to ſubſtract the quantity of the Morbifick Particles, by uſing ſuch a Food, as cannot poſſibly afford Matter for 'em.

Having then conſider'd theſe Medicines, I will ſuppoſe it granted me, that they are proper in this Caſe; I won't ſay that they ſhall be ſufficient to Cure of themſelves, (tho' I don't doubt but they may in ſome Conſtitutions do the Work themſelves) but I will only ſuppoſe, that they do greatly diſpoſe towards it, which

Poſtu-

Poſtulatum will, I conceive, be readily granted me; I will ſuppoſe likewiſe, that Riding (the Exerciſe I propoſe in this Caſe) does likewiſe diſpoſe towards a Cure, which *Poſtulatum* will be granted too; I will ſuppoſe farther, that theſe two Courſes are Compatible, and may be us'd together; as the Medicines help the Fluids, the Exerciſe helps both the Fluids and Solids; which *Poſtulatum* cannot be deny'd me neither; what then naturally Reſults from this, but that they be both us'd in Conjunction? And is it not more than probable, that theſe two Methods joyn'd, ſhall effect that which neither of 'em can ſingly? Do not we ſee enough of this every Day in Natural Occurrences, where one, two or three things, indifferent in themſelves, ſhall, when blended together, produce a valuable Effect, which none

none of 'em could alone? And ſhall theſe things be obſerv'd in leſſer Arts, and be ſlighted when a Man's Health is at Stake? Seeing we abound ſo in Compound Medicines, why may we not for once take up with a Compound Method of Cure, (if I may ſo ſpeak) that is, if we cannot obtain Health by one ſort of means alone, why may we not expect it from a Complication?

Thus I have run up theſe Arguments to a Head; I have ſhewn that the Medicines appropriated to this Caſe, ought to be very Mild and Temperate, upon the account of that leſs prevalent quality, there may be Hazard, leſt they ſhould not always prove equally effectual; and therefore to ſupply any ſuch Defect, I ſubſtitute a moſt eaſie Natural Gymnaſtick Courſe, as a common Aid

to

to the weakneſs of the Medicines, and an aſſiſtance to that part of the Oeconomy, which thoſe Medicines can't reach. Whether this is not moſt ſuitable to, and conſiſtent with the even Tenour of Nature, tho' it may not reliſh ſo much of the Magnificence of Art, I muſt ſubmit to thoſe who are beſt Judges; to me it ſeems to promiſe enough, and carry more Healing with it, than ſome things that are dignifi'd with the great Titles of *Gilead* and *Peru*.

If after all there are any People who will think, I have taken too much upon me, in venturing to attack the *Balſamick* Method, if they cannot think ſlightly of Medicines, which will give ſuch preſent mitigation of a Cough, and which are ſo Fragrant and Coſtly, let 'em enjoy their Opinion, and perſiſt in the uſe of them; and

if

if they find 'em at any time not ſo effectual as they could deſire, let 'em but ſuperadd the Power of Exerciſe, and they will doubtleſs find 'em much improv'd; and if they come by that Means to ſucceed, I ſhall not envy their good Effects.

Beſides theſe two main Indications, there is ſomething more to be conſider'd in the Cure of the Conſumption; and that is, how we may obviate the Moiſture of the Air; which is a very troubleſome Enemy to Conſumptive People, of what Conſtitution ſoever, who dare not make uſe of Generous Liquors to fence againſt it; for that Practice would be prejudicial upon another Account: Now what can be more Natural in this Caſe, than the raiſing the Spirits to reſiſt this Moiſture, by a gentle Motion

on of the whole Body, which at the ſame time, cauſes a greater Degree of Heat, and that equally diffus'd all over the Body, which muſt needs rarify in ſome meaſure, the moiſt Air, and beſides, make the hot and acrimonious Particles in the Blood, ſupply the place of warm Internal Medicines, which in another Perſon would have been proper to have been given, to oppoſe the Moiſture of the Air? Now this is much the ſame, that the Change of Air can effect in the Body of a Sick Perſon, for 'tis the equal Influence, the univerſal moderate Rarefaction of a warm Air, that makes it ſo beneficial, and if we will caſt in the benefit of the Tenſion, which is caus'd by moderate Riding, together with the Equality of the Heat, it will appear to be very little ſhort of what is uſually expected from a Journey

ney into a Foreign Air, and I could here give an Inſtance of a Gentleman, who, when he was in the South of *France*, found but little Relief, any longer than when he was on Horſe-back; and who after his return to *England*, found that Riding ſupported him as much, as the Change of Air; So that upon the Conſideration of the equal promoting of the inſenſible Perſpiration, and the Benefit, which at the ſame time accrues to the Solid Parts, this Exerciſe which I have ſo much inſiſted on, may be allow'd to be almoſt, if not altogether, an Equivalent to a Warmer Climate.

Laſtly, I ſhall urge but this one more Reaſon for this Exerciſe, which is not taken from a Natural, but a Prudential Conſideration, from the particular Humour of moſt People in this Diſtemper,

who are ſtrangely inclin'd to think themſelves in no great Danger, even tho' the Diſtemper is far advanc'd; they dont love to be told the Truth, tho' it is ever ſo neceſſary; but an honeſt Phyſician is to them, as *Micaiah* was to *Ahab*, he never has any thing good to ſay of 'em; they think they are ſtrong enough in the Main; they'll tell ye, they ſhould be as well as ever, if their Scurvey Cough, or the weight on their Breaſt was but remov'd: Now the Genius of the Sick muſt be conſider'd, and theſe People who have ſo good an Opinion of themſelves, may in ſome Senſe be indulg'd and wrought upon to exert their Imaginary Strength in Gentle Riding, and then they may perhaps come to enjoy that which is real.

I might now proceed farther, to conſider in what degree of this Diſtemper Riding will be beneficial, whether any thing is to be expected from it in the ſecond and laſt State of it; but this would be to run out beyond my Deſign of Brevity; only I ſhall take Notice, that it is no rare thing to meet with Conſumptions, without any Putrid Fever, or any Reaſon to believe an Ulcer in the Lungs, or perhaps ſo much as Tubercles, but a continual Hectick, and a precipitate Waſte of Nature by the Direful Acrimony and ill Quality of the *Serum*, as Doctor *Benet*, in his *Theatrum Tabidorum* obſerves, *Pag.* 109. *Tabidorum languor ſine pulmonum aut viſceris cujuſlibet corruptelâ tacitâ vi obrepens Anglis infeſtiſſimus eſt, & niſi primis obediverit remediis (quod rariſſimè evenit) funeſtus.* In this Caſe I can't but be of Opinion, that Riding well

manag'd would be ſerviceable, tho' undertook very late, if there is any tolerable Meaſure of Strength left to put it in Practice.

I muſt here again repeat, that when I here ſpeak of Riding, I underſtand the Habit of Riding, the want of which Diſtinction, has made it ineffectual to many a Man; He that in this Diſtemper above all others rides for his Health, muſt be like a *Tartar*, in a manner always on Horſe back, and then from a weak Condition, he may come to the Strength of a *Tartar*. He that would have his *Life for a Prey*, muſt hunt after it, and when once he finds his Enemy give way, muſt not leave off, but follow his Blow, till he ſubdue him beyond the Poſſibility of a Return. He that carries this Reſolution with him, will I doubt not experience the Happy Effects of the good old

Direction,

Direction, *Recipe Caballum*; he will find that the *Engliſh* Pad is the moſt noble Medium, to be made uſe of for a Recovery from a Diſtemper, which we in this Nation, have but too much reaſon by way of Eminence to ſtile *Engliſh*.

OF THE

DROPSIE.

THE Second Diſtemper which I ſhall conſider as ſubject to theſe Meaſures, is one *Species* of the *Dropſie*; that is, the *Anaſarcous* Kind, from which likewiſe I except thoſe, which are attended with a hard Liver, or a remarkable Obſtruction of ſome of the *Viſcera*.

This kind of *Dropſie*, thus circumſtantiated, does at firſt View ſeem not to need the Aſſiſtance of any extraordinary means to help towards a Cure, it being the moſt Curable of all Dropſies; and we have daily Inſtances of its giving

ving way to Common Medicines, nevertheleſs there are ſuch exceptions in this moſt Favourable Caſe, as give trouble enough to a Phyſician ſometimes, and requires more than uſual Application; as for Inſtance; ſometimes a Perſon happens to be brought ſo low by an Unſeaſonable Purge, that afterwards Diureticks and Corroboratives will have no effect upon him, but the Caſe becomes deplorable, without the Rupture of any *Lympheducts* or other the like Difficulty.

Secondly, when People decline in Years, there are ſome extraordinary means requiſite to make the Remedies exert themſelves with like Succeſs, as they do in Younger Perſons.

Thirdly, in Hyſterick Women, it is difficult to carry off the load

of Water by common means, without ſome ſuch Method as I ſhall hereafter mention; becauſe their Spirits are ſo low, that they can bear no conſiderable Evacuation.

Fourthly, when a Dropſie comes upon an *Aſthmatick* Perſon, there are particular Difficulties ariſe, and the ſingular Advantages of conſtant and gentle Exerciſe in this Caſe are univerſally known.

Theſe four different Circumſtances of this Diſtemper, may ſuffice to ſhew that I have Colour enough for my calling in the Gymnaſtick Method into this Caſe, and 'tis the firſt of the Exceptions, I mean the ill Effects, which ſometimes follow upon the Uſe of Purgatives, which have chiefly occaſion'd me to inquire, whether we ought in this plain Caſe, thus circum-

circumſtantiated to halt between two Opinions, between Purgatives and Diureticks, without endeavouring to eſtabliſh a certain Praxis upon Juſt Foundations.

There are none will deny, but Diureticks are the moſt proper and natural Remedies in this Caſe, if they would always ſucceed, becauſe directed to the proper Emunctory, the Kidneys, and becauſe they can go hand in hand, with the Corroborative Medicines to be given at the ſame time; I take it for granted therefore, that whenever Purgatives are us'd in this Caſe, it is becauſe the Diureticks don't take quick enough, or in order to carry off the load of *Serum*, that the Diureticks may the ſooner diſplay their good effects, becauſe it will be alledg'd that the *Serum* becomes ſo Ropy

and

and Glutinous in the Paſſages and Capillary Parts, that the Diuretick cannot always act upon it. But tho' this is granted, it will not ſuffice to warrant the Uſe of the ſtronger Purgatives, becauſe their manner of Acting cannot agree with this Diſtemper, and becauſe thoſe difficulties objected, may be overcome by other means.

Firſt, the very Nature of ſtrong Purgers, makes againſt this Caſe, it ſeems very prepoſterous, to have recourſe to ſuch Deleterious Drugs, to thoſe *Mortis Catapultæ* (as *Ludovicus* calls the *Eſula's* and ſuch like Purgatives) in Order to the Reſtoring an impoveriſh'd Blood; if they acted only by Stimulating the Inteſtines, ſomething might be ſaid; but ſince it is indiſputable that they paſs into the Blood, and act powerfully upon it, there is no doubt

to

to be made, but they fuze and divide it, and break its Globules, and conſequently make as much Water as they carry off, which is the very Reaſon why Sweating is laid aſide, and Salivation, tho' they both ſeem ſo proper to carry off Watery Humours; I know it may be alledg'd in Defence of theſe Medicaments, that the 36*th* and 37*th* *Aphoriſms*, of the *Second Section* ſeem to imply, that a Sick Perſon would receive leſs Harm from 'em, than one that is in Health; but yet this will not excuſe their Uſe in our Caſe, becauſe tho' the Viſcouſneſs of the *Serum*, may blunt the Particles of thoſe Drugs for a time, and hinder 'em from working ſo quickly, yet when once they are throughly imbib'd, and begin to exert their Force, they ravage the very Principles of Life, and can by no means be fit for

for a Perſon in ſo low a condition. But admit that the Water is carry'd off by theſe means, the Blood will be left as poor at leaſt as it was before the Dropſie firſt appear'd; and then how can we be ſure the Waters will not riſe again? Suppoſe an *Anaſarca* follows upon an *Hæmorrhage*, which is very common, and you draw off the Water by Purging; will not the Perſon be juſt in *Statu quo*, upon ſuppoſition that the Medicines in their working did not impair Nature? but that is not to be granted, becauſe it is impoſſible to ſuppoſe, that ſuch *Draſtick* Medicines, ſhould not prey upon Nature, even while they are aſſiſting her; and can we be aſſur'd that the Blood will not run into the ſame Colliquation it did before? Beſides, may there not be ſome reaſon to ſuſpect that the very quantity of the *Serum*, ſuppoſing it is not too Tur-

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gid indeed, may ſometimes be ſerviceable, to the promoting the activity of the Diuretick, even as we find in the true *Aſcites*, it is of ſome uſe in the Cavity of thoſe Perſons, becauſe they often can't ſpare it, without certain Ruine? We don't know how much the conſiſtence of the Fluid may conduce to the keeping its homogeneous Particles combin'd, and we ought to be very tender of doing any thing, that might tend to diſſolve the *Craſſamentum*, the Globules, which are as it were the very *Semen Sanguinis* (if I may ſo ſpeak); for how far Nature would endure ſuch meaſures, before the Sanguification would be totally ſubverted, would require a Diſſertation, longer than my Scope will permit; but that this is ſometimes done is not improbable, and I take this to be the Caſe of a Young Fellow I knew, who fal-

ling

ling into a ſlight Dropſie, goes to an *Empirick* ſomewhere about *White-Chapel*, from whom he had a Doſe of Pills, which gave him about 30 Stools, which ſunk him ſo much that his Nails turn'd black, and he died in two or three days time; Here 'tis very likely the Sanguification was entirely extinct, and the Blood chang'd into a Preternatural Fluid, and all by the great Power of theſe Deleterious Drugs; and tho' 'tis likely the Quack did not know the proper Doſe of his Medicines, yet one would think, this was no more than what might be expected from Ten Grains of *Elaterium*, which yet has been allow'd by an Eminent Writer.

Beſides the weak State of the Blood, the Ventricle is always more or leſs impair'd in this Diſtemper, and conſequently unable

ble to be put to bear the violent *Stimuli* of the ſtronger Purgers, without Danger of having its Tone irrecoverably ruin'd.

It may likewiſe be Prudent to forbear Purging in this Caſe, leſt happily there ſhould be ſome greater Obſtruction in the Liver, than we are aware on, for then it might be follow'd with ill Conſequences; 'tis true, if that Bowel is really *Schirrous*, it may be diſcern'd, or a great Tendency toward it, will ſhew it ſelf ſometimes in the Greeneſs and Virulency of the Bile mixt in the Excrements, together with other Indications; but a ſlight diſorder there, is not always regarded, and Brick-colour'd turbid Urines are ſo common in all kind of Dropſies, that we may not diſcern that the Blood does abound too much with Bile, and ſo a Purge given

at

at ſuch a time may do a great deal of Miſchief, for the Bile is of a light Nature in Compariſon of the *Phlegm*, and moves eaſily, and no Man knows what he does when he rouzes it; I knew an ill accident happen once upon a Purge, given by a very Eminent Phyſician, to a Gentleman in a *Jaundice*, which put him into the moſt extravagant and fatal *Hypercatharſis*: thus bold Adminiſtrations to ſuch weak Subjects, may be attended with Tragical Accidents, but the milder and gradual meaſure may ſucceed, without ſuch dangerous Risks, if we conſider what have been the Difficulties which have lain in the way, and hindred the Operation of our Diureticks.

The ill Succeſs of our Diuretick Method in this Diſtemper, is very much owing to our giving

thoſe Medicines in ſo ſmall a Quantity, and to our not changing 'em for ſome of a quite different Nature, when one ſort us'd pertinaciouſly does not take; that the quantity muſt be encreas'd, there needs no better Argument, than what is brought for the uſe of Purgers; for if the Blood can diſpenſe with the Particles of a Purgative, it will certainly bear a great quantity of thoſe which are Diuretick only. What Wonders has that Golden Remedy of *Pythagoras*, done, the *Acetum Scylliticum*, when given to a proper quantity? And what may not be expected from the *Sal Succini*, which may be given to a Doſe large enough to irritate the Fibres of the Stomach, and in ſome meaſure ſupply the place of a gentle Purger; but when it is come into the Blood it may prove Cordial as well as inciding? And now I am ſpeaking of augmen-

ting the Quantity of our Diureticks, I can here affirm a very ſtrange Effect that follow'd upon on exceſſive Doſe of *Millepedes* in an odd kind of a Rheumatick Caſe, for the Cure of which, ſeveral things had been try'd in Vain, by very good Advice; the *Millepedes* were given to a quantity ſcarce credible, to ſeveral Ounces, and gave a Relief in a little time that exceeded all Expectation. This with other inſtances ſomething of the like nature, every where to be met with, may convince us, that we ought to advance the quantity of theſe Medicines, to which if we apply the Uſe of Exerciſe, the higheſt Advantages may be expected: For to grant as much as the favourers of the Purging Method can demand, that by reaſon of the forementiond Ropineſs of the *Serum*, the Diureticks and Chalybeates

beates will but diſtend the parts, and make the Juices grow Turgid. Is there no way to remove the Dam, but by ſhaking all Nature at the ſame time? Muſt we blow up the Houſe to get the Enemy out? To what purpoſe do we talk ſo much of the Animal Oeconomy, if we reduce its Rules to Practice no more than we do? We are taught the Benefit ariſing from the Conſtriction of the Muſcles upon the Veſſels; and can there be any Caſe which does more apparently call for it than this? When it is hazardous to attempt by inward Violence to diſlodge the Viſcous Concretions, certainly it is high time to do it by Muſcular Force. This *Hippocrates* ſeems to be experimentally convinc'd of, by his frequent inculcating the Uſe of Exerciſes in this Diſtemper, Δεῖ παλαιπωρέειν *you muſt labour*, is his conſtant Expreſ-

ſion, whenever he ſpeaks of the Dropſie; which, whoever conſiders the Conciſeneſs that is in all the Writings of that Great Man, will be apt to imagine that it carries its Weight with it, and implies the abſolute neceſſity of acting upon the Lentor of the Phlegm, by the playing of the Muſcles. Beſides Exerciſe will help to reſtore the Tone of the Parts, which is ſometimes ſpoil'd by too great a Diſtenſion, even ſo much as to be in a manner benum'd, which *Helmont* ſeems to lay much ſtreſs on, when he, according to his odd fantaſtick way, calls it the *Anger of the Archæus*, that won't let the Waters paſs; and if there is this kind of Spaſmodick Affect in the Parts leading to the Kidneys, then certainly there is as much Reaſon for one in a Dropſie to get into a Coach upon his taking his Medicines, that the frequent

quent jolting may aſſiſt their Operation, as there is for one in a Fit of the Gravel ſo to do. The Heat that is acquir'd by the Motion of the Body, muſt needs comfort the Parts, and rarifie a great deal of the Moiſture, ſo that it may the more eaſily paſs the Membranes, as they are dilated by Exerciſe; and if we can by ſqueezing, make Water paſs through Leather, the whole Skin dry'd and prepar'd, may it not much more eaſily paſs the Membranes of a living Animal, when work'd and ſtretch'd by Motion, and aſſiſted by the Warmth which that Motion produces? Theſe may be thought little things by ſome, but they will be found to be of great Conſequence; by ſuch minute Meaſures, Nature can produce great Effects; and by a Neglect of theſe things, many a great Life has been loſt, in Dependence upon ſome-

thing of a greater Name, that has had no Relation to the Genuine proceedings of Nature.

These are some of the Reasons which have convinc'd me of the Preference of the Diuretick Course, and which I think can't be overthrown, by all the Examples of the Success of Purgers, because if we compute the Ill Effects of 'em likewise, and set 'em to balance the good, the very Cures done by 'em, will seem but as so many *Splendida Peccata*. We ought not hastily to quit safe Means for those which are dangerous, only because they are a little more expeditious; when a Case is within our Reach, we ought to Establish our Prognosticks upon sure ground, tho' they may not be so quick as could be wish'd; we have other Dropsies that are dubious enough, but in this Case

we ought to ſtudy to bring things to a certainty as much as poſſible; which how can we do unleſs our Methods are Uniform? It behoves the Patrons of Purgatives to aſſign ſome certain Rule, to render the Uſe of 'em always ſafe, which ſeems impoſſible to be done; and it behoves thoſe who are for inſiſting on Diureticks, to find out ſome ſuch Meaſures, as may make theſe milder Medicines always Efficacious; which is what I have been attempting to do; and which, if I don't flatter my ſelf, I think I have made to appear plain and obvious; for if we can't arrive at ſome comfortable certainty in this Caſe, I don't know in what we can do ſo; for we are ſo happy as to have thoſe things as will certainly act upon ſuch a Craſis of the Blood, as will revive and enrich it, when decay'd, tho' not always in the like ſpace of time;

and when they act too ſlowly, we can enforce their Virtue, by theſe ways I have been ſpeaking of.

Theſe things are no Figment of mine, they have been the Practice of Ancient Times, and are ſo natural a Reſult from a due Conſideration of the Animal Oeconomy, that I cannot enough wonder that in ſo many Diſcourſes upon thoſe Fundamental Rules, there has been ſo little Notice taken of the Effects of the Motion of the whole individual, as ſuperinduc'd to the internal Motions, that make up the Oeconomy; for if this had been duly regarded, it could not but have been reduc'd to Practice, and apply'd particularly to the Cure of this Diſtemper.

Laſtly, I know theſe are hard Sayings to ſome People, who ſend for

for a Phyſician, as for one that deals in Charms, and can remove all their Afflictions, while they are wholly Paſſive, and they would take it very ill that they ſhould be compell'd to a ſort of Labour, while they carry about 'em a Load in their Limbs; but yet for all this, Nature will be Nature ſtill; and if this be her Voice it muſt be obey'd. He that is in a Dropſie ought to be Alarm'd, and look upon himſelf as in ſomething the like Caſe with thoſe Criminals whom the *Dutch*, upon their refuſing to Work, confine to a Cellar, and let the Water in upon 'em, that they may be in a Neceſſity either of Pumping or Drowning. And I believe there are but few, but who, upon their being convinc'd of the real and ſurprizing Benefit of theſe Means, would readily undergo the Fatigue of 'em; and things

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may be ſo manag'd, that Exerciſe may not be ſo troubleſome as the Sick imagine; an eaſie Pad will quickly grow familiar; and where the Legs happen to be ſo very much diſtended, that there may be ſome danger, leſt the Skin ſhould be rub'd off, a Chaiſe may ſerve the turn.

OF

OF THE

Hypochondriacal DISTEMPER.

THE third and laſt Caſe, which I ſhall expreſly conſider, is the *Hyſterick* or *Hypochondriacal* Caſe; in the Cure of which the ſeveral Exerciſes, which I ſhall hereafter Recommend, may all be us'd. This Diſtemper falls the moſt under a Gymnaſtick Method, becauſe the leaſt proper to be treated with much Internal Phyſick; this is a Diſtemper which will not drive, as we ſay, but if kindly treated will lead, that is, will not be expell'd by Pur-

Purging, Bleeding, Sweating or the like, but muſt be treated by more gentle and leiſurely Methods; 'tis a Diſtemper of the Spirits, and the Veſſels which immediately convey 'em; and therefore thoſe means by which they are more immediately affected, are the moſt likely to prove beneficial. Here it is, if ever, ſtrictly true, that a little Matter gives the turn, but then that little matter muſt be equally apply'd; we muſt give an equal lift to all the Parts of the Oeconomy at the ſame time, we muſt not apply to the Fluids, and neglect the Solids. 'Tis the want of this Diſtinction, which I take to be the Ground of all our miſtakes in the Cure of this Diſtemper; we cure but half the Man. When I meet with a Languid Hyſterick Pulſe, I can eaſily raiſe it, and give a full Beat to the Artery, by

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Anti-Hyſterick Medicines; but then what becomes of the Nerves, they are not much help'd by this, But ſometimes impair'd by it? but then let the ſame Perſon have Recourſe to ſome moderate Exerciſe, his Pulſe ſhall riſe as high as upon the uſe of Internals, but with this Difference, that the Nerves as well as the Blood partake of the Benefit. For we may diſtinguiſh between this natural advance of the Bodily heat, which is procur'd by Exerciſes, and that which is acquir'd by Medicines, juſt as we may between the Effects of the Kindly Heat of the Sun, and thoſe of an Artificial Fire: Now in the matter of the Vegetation of Plants, and the Management of ſome ſorts of nicer Workmanſhip, tho' the greateſt Care and Induſtry be us'd to raiſe a gentle heat, which to our Senſes and even to the Meaſure of the Thermometer,

mometer, may ſeem equal to that of the Sun, yet it ſhall never be able to produce the ſame exquiſite effects, as the heat of the Sun does. And ſo we ſee in this Caſe the mildeſt and ſeemingly moſt agreeable Gumms prove Purgers to ſome of theſe People, others again can't bear *Caſtor*, without ſome troubleſome inconveniences; and how much ſoever ſome People may be Rapt up with their *Sal Volatile*, and ſuch like Preparations, I can perhaps give an inſtance of more wonderful Relief given in this Caſe, by a more Common Cordial, than ever thoſe ſplendid Medicines could produce; it may not be amiſs to relate it in this place, becauſe it ſerves to illuſtrate my Deſign in ſhewing that nothing that has the leaſt ſeeming Violence in it, or rather that nothing, which is not very mild and agreeable to Nature,

ture, can be of very great Moment in the Cure of this Diſtemper. The Inſtance then I mean, was communicated to me by an Eminent Phyſician, and very Learned Writer, and is this; He was call'd to ſee a Maid which had been ſeverely Tormented with Hyſterick Fits for ſeveral days, and had taken plenty of the Remedies uſual in that Caſe, without any Effect; upon which he was reſolv'd to try, what a good large Doſe of a true generous Wine would do, conſidering ſhe was a Servant, and conſequently could not be ſuppos'd to be accuſtom'd to that Liquor, which would have render'd his attempt fruitleſs; he therefore preſcrib'd ſome Pouders of no Efficacy, to obviate the Phancy of the By-ſtanders, and order'd the Apothecary to ply her with ſome Wine of his own procuring, that he could depend

pend upon, till ſhe had taken a quantity, which to her might be reckon'd very large; this ſucceeded like a Charm, after a good Sleep, ſhe was freed of all her terrible Symptoms the next Morning, tho' before ſhe could ſcarce ſtir her head from the Pillow, but ſhe fell into a Fit. And I have twice had the Occaſion, to ſee ſomething of the like nature my ſelf; the firſt was, where a large Doſe of Wine took off ſome very ill Symptoms, occaſion'd by ſtrong Purgers, erroneouſly repeated in a certain Nervous Caſe. But the Perſon had not been us'd to drink Wine, otherwiſe it could not have produc'd ſuch a happy effect. I inſtance in theſe things only to ſhew, that the Remedies which are moſt proper and adequate to this Caſe, muſt be ſuch as have ſomething of an inimitable Mediocrity in 'em; and that Exer-

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ciſes do produce Alterations in the Body, which reſemble the effects of ſuch a ſingular and Noble Mien, is not improbable, in regard they act ſo equally (as I obſerv'd before) both upon the Solids and Fluids. And one would think the Ill Succeſs of any thing, but like Violence, ſhould lead us to ſome ſuch Meaſures as theſe. One would be apt to think that when a Diſtemper, which carries as little, or may be, the leaſt danger of Life in it, of any whatſoever, tho' ſo very troubleſome, when this nevertheleſs becomes one of the moſt difficult to be perfectly rooted out, one would think, I ſay, that this odd Circumſtance, ſo like to Contradiction, ſhould prompt us to look out for the real Reaſon of it.

Upon theſe Conſiderations I can't but admire, that the ſame

Adminiſtrations, or with very little difference, (excepting the Chalybeates which may be allow'd in both Caſes) are thought proper for Temperate Women, and Men of Intemperance, when they happen to fall into the Hypochondriacal Affect, as is frequently enough known; one would think that when the Diſorder in theſe latter is owing to the exceſs of a Liquor, both wholſom enough and Cordial enough in it ſelf, which by its too frequent uſe has relax'd the Nerves, and conſequently impair'd the Spirits, there ſhould be little likelyhood it ſhould be remov'd, and taken off by hot Medicines in a Solid form, which perhaps don't differ ſo much as moſt People imagine, in their real intrinſick Energy from that Noble Liquid, to which theſe Gentlemen owe their Malady; I ſay, one would think that

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ſome ſuch Surmiſes as theſe, ſhould naturally lead us to an immediate attempt upon the Parts affected, *viz.* the Nerves, which muſt be done by means ſuitable to 'em, that is by Exerciſe.

Wherever there is a Dejection of the Mind, and a Propenſity to Phantaſtick and Imaginary Fears, there is reaſon to ſuſpect the Solids, that is, the Nerves are more in fault than we think for; we may conſider that when a Man is Drunk, he ſeldom loſes his intellectual Faculties, to any great degree, till the Nerves are quite ſtreſs'd with the Load of Wine, and his Feet go commonly before his Reaſon; and if this were a proper place, perhaps, I could ſhew ſome Reaſons for us to ſuſpect the ſame, in the Deliriums of People in a Fever, that the intenſe heat muſt firſt evidently

impair the whole body of the Nerves, before the Underſtanding will be quite loſt. We don't know what a great deal of Rotation and irregular Agitation the Spirits ſtrictly taken will bear, without any Damage receiv'd; but when the Nerves, the Container of thoſe Spirits, are conſiderably affected, the Spirits contain'd muſt partake of the Miſchief. We know but little of that inconceivable Connexion of Soul and Body, but the wonderful Bond of Union, ſeems to terminate very much in the Fibre. For we may obſerve, that thoſe Poiſonous Vegetables which intoxicate, and attack the Rational Faculty, do chiefly diſplay their Power on the Nerves, 'tis in their very Nature, and in the leaſt quantity to hurt the Nerves; and when Wine, tho' in its Quality moſt agreeable, is by the Quantity and Repetition of it, made to be

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prejudicial to the Nervous Syſtem, I can't imagine, how other Cordial Medicines, which muſt ſtill in ſome Meaſure keep up the Streſs upon the weakned Nerves can be the adequate Remedy of this Diſeaſe, but that the Nerves muſt be aſſiſted after their own way, after a manner ſuitable to their Nature, that is by Exerciſes; for it is, and ever will be one of the Properties of a Fibre, to be the ſtronger for Motion, the better for wearing; and it is but a Law of Nature, ariſing from the Neceſſity of the Conſtitution, that while the Fluids are continually waſting and running off the faſter, for the Motion of the whole Individual, the other part of the Conſtitution, the Solids, the Fibres ſhould by the ſame Means reap ſome Advantages proper, and in ſome meaſure ſufficient to Balance the Conſequences of ſuch a *Diſpendium*.

All this receives certain weight from the Argument which is ſo Naturally ſuggeſted to us, by the familiar and daily Obſervations, which every one cannot but make on the Health of the Poorer ſort of People, eſpecially their immunity from this Diſtemper. That it is matter of wonder that the Spaſms, the Tremors, the Shiverings, the Watchings, and all the very numerous Plagues of an Hyſterick Perſon, ſhould not be able to rouſe People into a Queſt of Health, upon Meaſures ſuitable to the Cauſes of things; that ſuch Painful experience ſhould not animate 'em, into a Reſolution to exchange the Pains of a ſedentary, for the Indolence at leaſt, not to ſay, the Pleaſures of an Active Life. I am confident no one could forbear making theſe Inferences, and reducing 'em to practice, who has been any conſiderable time infeſted with

with this Diſtemper, were it not for the preſent Comfort and falſe Hope, which are conceiv'd from ſome Palliative Remedies, in too much uſe in this Caſe; I mean Vinous Spirits, and Compoſitions Diſtill'd upon 'em, which becauſe in the beginning of this Diſtemper, they are found to be comfortable and really uſeful, entice People to have recourſe to the uſe of 'em, oftner than they ought to do, and in time ſeduce 'em ſo much by that Deluſive flaſh of Eaſe, which they give in the firſt Moments of their Drinking, that they cannot have a due Regard to the Evil Conſequences of ſuch a Practice; theſe Liquors prove a meer Charm, they creep into the Underſtanding, and teach People to impoſe upon themſelves, and fanſie Excuſes for the uſe of 'em, till they come to be ſo blinded as to think that Health it ſelf, is

ſcarce an equivalent for the Pleaſures which muſt be deny'd, in the Abſtinence from 'em. They who have brought themſelves to ſuch a Cuſtom, are not unlike ſome of our Debtors, who after they have been ſome time in a Priſon, and learn'd the way, of living an Idle Life upon other Folks Coſt, tho' under Confinement, they loſe all ſenſe of Liberty, and never deſire to ſubſiſt again, upon the ſevere Conditions of Induſtry and Labour; and ſo thoſe who have learn'd to ſip of this Spirituous *Lethe*, quite forget the value of Health and Strength; they can drown their Vapours, blunt their Pains, and rub on without great danger a good while, and therefore as for brisk Exerciſe, the Cold Bath, and the like, they deſire to be excus'd; there's too much Danger in the Practice, there's *a Lyon in the Way*;

Way; and thus a ſickly complaining Life they lead, becauſe they will not take Courage, to uſe the Juſt endeavours after a real State of Health. Theſe I take to be ſome of the Reaſons, why this Diſtemper is ſo ſeldom totally extirpated, and is become the *Opprobrium* both of the Patient and Phyſician; for elſe it would be impoſſible, that People ſhould generally reſiſt the Conſequence of that Obſervation which I hinted before: For if the Labour of the Poor generally ſecures 'em from this Diſtemper, and if this Diſtemper, whenever it ſeizes, is of ſo nice and tender a Nature, that it will ſcarce allow of any of the common Methods us'd in the Cure of other Diſtempers, certainly it behoves the Perſons ſo griev'd, to try whether thoſe Means which are Preſervative to others, may not prove Curative

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to them; which, by reaſon that the Subject of the Diſtemper, *viz.* the Spirits and Nerves are primarily affected by Exerciſe, proves highly probable. For why there ſhould be ſuch dependance on Internals univerſally, and even in this Caſe, I can't ſee; to me it ſeems almoſt as Ridiculous, as if a Workman ſhould uſe but one ſort of Tool in working on Wood, Stone, Braſs, and all other Materials.

I need not here take Notice of any of the particular Symptoms of this variable Diſeaſe, they all being liable to the ſame Regimen; I have already in another place hinted what Relief may be procur'd by this Method in the Hyſterick Colick, and in the obſtinate Watchings, which will ſcarce ſubmit to the uſe of *Laudanum*, or at leaſt without ill Conſequences.

ces. Therefore I ſhall conclude they all fall under the Power of a Reſolute COURSE of EXERCISE.

The Exerciſes moſt proper here are *Riding*, and the Uſe of the *Cold Bath*; the firſt prepares for the ſecond; which Rule if ſome People, who are the moſt weakly, wou'd obſerve, they might ſecure themſelves, from ſome of thoſe few Accidents that have befel the too raſh entrance into the Cold Bath. Inſtead of Riding on Horſe-back, Women may take a Chaiſe, which will allow of ſwift Motion, and comes little ſhort of the Horſe for Agitation of the Body; tho' I can't ſee any breach of *Decorum*, if a Lady, attended with a Servant, ſhould ride on Horſe-back daily for Health, if ſhe like it beſt; as for thoſe, who upon the Account of their being very

very Fat, have ſome Reaſon to be cautious, how they go into the Cold Bath, leſt ſome Apoplectick Symptoms ſhould enſue, they may have recourſe to another of thoſe Exerciſes, which I ſhall treat of, *viz.* the uſe of the *Bruſh*, or *Chafing*, which if us'd in good earneſt, will not prove ſo trivial as perhaps ſome People imagine it to be.

Theſe are the Chief Exerciſes which I would recommend in this Caſe, and which if us'd with Prudence and Application, I doubt not are able to effect a compleat and Eradicative Cure of this Diſtemper, as certainly as more violent internal Means are expected to ſucceed in any other Caſe, the Spirits and Nerves being not ſo much more untractable, than the Blood and Humours,

mours, if treated after a manner ſuitable to their Nature.

What I have ſaid of theſe three Caſes, may ſerve to illuſtrate the neceſſity of this Method in ſome few other Caſes, which I need only Name; as the *Scorbutick Rheumatiſm*, which being a Nervous Caſe, will admit of the three Exerciſes I have mention'd, which if ſtrenuouſly put in Practice at proper Seaſons, will do Wonders in the removing of thoſe Pains. The *Nervous Atrophy* is another Caſe, which may be remov'd by a Gymnaſtick Method, when all the Pompous Internal Medicines will not avail.

Laſtly, There is one more Caſe, to which Riding ſeems to be in a peculiar manner appropriated, and that is, that Decay of Nature which is occaſion'd by Paſſions of the

the Mind, which we commonly call, Breaking the Heart; here the Spirits are broke, and ruined by the ſtreſs of Thought, the Mind drinks up the Vital Fluids, and the Ravage proceeds ſo faſt, that nothing can avail, but what can in ſome Meaſure interrupt the Eagerneſs of Thought, and repair in Proportion to the waſte of the Spirits, which Riding ſeems moſt likely to do, becauſe it gives an Alacrity beyond that of Wine; becauſe the Briskneſs of the Motion, muſt take a Man off from cloſe thinking, and ſuch Exerciſe continued long, even to ſome Journeys, muſt by Tiring incline to Reſt, and break off thoſe voluntary Wakings and anxious Thoughts, which are ſo pernicious; and if ſome intervals of Eaſe can be gain'd in this Caſe, there is hopes that Reaſon or Religion may take place, and the

Paſſions

Paſſions may be laid: For 'tis the firſt Fury that is the moſt Dangerous and Violent; if that can be manag'd, the Point is gain'd, and there is nothing like Hurrying the Body, to divert the Hurry of the Mind.

Theſe are moſt of, if not all, the Caſes which fall under the Power of Exerciſe as Curative; as for the Benefit which may be obtain'd by Exerciſe, in the Gravel, the Gout, and the like, it is purely Palliative, and therefore out of the Scope of my Intention in this Treatiſe: I ſhall now proceed to conſider briefly, thoſe ſeveral Sorts of Exerciſe, which ſeem proper to my Deſign.

And here I ſhall not inſiſt upon the various Exerciſes of the Ancients, or all thoſe in Uſe now in our Days, but ſhall make choice of

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but a few, that ſeem moſt Compatible with the Weakneſs and Infirmities of Sick People, and the particular Circumſtances of thoſe Diſtempers which I have already mention'd, and I ſhall begin with the chief of 'em, which is that of RIDING.

OF

OF THE EXERCISE OF RIDING.

UPON ſeveral Accounts, this may be eſteem'd the beſt and Nobleſt of all *Exerciſes* for a Sick Perſon; whether we conſider it with Reſpect to the Body or the Mind; if we Enquire after what manner it affects the Body, we ſhall find that it is a kind of mixt Exerciſe, partly *Active* and partly *Paſſive*; the lower parts of the Body, being in ſome meaſure employ'd, while the upper parts are almoſt wholly Re-

miſs or Relax'd ; nay, where a Man is eaſie, is ſure of his Horſe, and rides looſe, there is very little Action on his Part, but he may give himſelf to be as careleſs almoſt as if he he were Seated on a Moving Chair ; ſo that he may be ſaid to be Exercis'd rather than to Exerciſe himſelf ; which makes the Caſe widely different from almoſt all other ſorts of Exerciſe, as Walking, Running, Stooping, or the like ; all which require ſome Labour, and conſequently more Strength for their Performance ; in all which, the Muſcular Parts muſt be put to ſome Streſs, and ſome of the Secretory Veſſels made to throw off too much, while others throw off too little ; whereas in Riding, the Parts being incomparably more relax'd, there is a better Diſpoſition towards an equal Secretion of the Morbifick Parti-

cles, and a leſs Expence of the Animal Spirits, the chief Agents in all regular Secretions; ſo that a Sick Perſon may by this means by greatly reliev'd and not tyr'd, whereas by other more violent ones, it is poſſible he may be tyr'd and not reliev'd.

As for the Parts which are more immediately acted upon by this Exerciſe; it it is very plain they are the whole Contents of the Lower Belly, ſo that the Glands of the *Meſentery* and the Inteſtines, ſo frequently accus'd of Obſtructions, may in a ſpecial manner be clear'd, and their Tone recovered by ſuch repeated Agitation; which is a thing ſo manifeſt and allow'd, that it would be needleſs to multiply Words in the explaining of it. But there is another ſort of Aſſiſtance communicated to the Inteſtines, which is

not ſo much heeded, and that is the great Alteration, which is made by this Agitation, in ſome of the Morbifick Particles, as they come to be ſqueez'd out of their ſeveral Glands into the Inteſtines, which in the time of Riding is doubtleſs in a much greater quantity than at other times. Theſe Particles muſt not be ſuppos'd to be barely carry'd off as Excrementitious, but to undergo a Change in their Texture, to be ſeveral times in a manner Cohobated, from Acid and Acrimonious, to be Volatiliz'd, and in ſome meaſure render'd inflammable; that there is ſome ſuch Alteration made in the more liquid part of the Contents of the Inteſtines, before they come to grow hard in a true State of Health is eaſie to prove, and I believe agreed on by moſt Enquirers into the Oeconomy of Nature, and

that

that there is ſome Defect in theſe Operations of the Bowels, in ſome ſick People, is evident from the Conſiſtence, Smell and other Qualities of theſe Contents, different from what they are found in a State of Health; and that this Defect may be remov'd by this Exerciſe, ſeems not improbable, if we conſider how immediately Riding affects thoſe parts, that it acts as a Topick, by thoſe infinite Succuſſions coming cloſe upon one another, which muſt needs cauſe a greater Heat than ordinarily, and a better Mixture of ſome of the Similar Particles, and a Rarefaction of others, which after they are thus differently Modefied and alter'd, are many of 'em as it were chaf'd in again by that continual Agitation, and the Steam of their inflammable Parts is of Uſe, to keep Nature even under the Exerciſe; that

there is ſomething like this to be obſerv'd in the actions of the Bowels might be confirm'd, by what Glyſters are known to do. I would not willingly verge towards the Fraud of an Hypotheſis; I may be allow'd to have had ſome more than Common Occaſion, to put me upon making theſe Obſervations, having ſome time ago been ſo unhappy, as to labour under as ſevere a Flux, as perhaps ever was known, which held me about a Year and a Half, attended with Vomitings, and moſt unſupportable Nervous Symptoms; during all which time nothing reliev'd me, in the greateſt Paroxiſms of it, like gentle Riding, in ſo much that at laſt I was forc'd to be in a manner always on Horſeback, to have the Preſſure on my Bowels rebated, and my Spirits a little refreſh'd. The Comfort which

I found by that means, I think muſt be attributed to ſome ſuch *Phænomena* as I have above mention'd; for tho' I will grant, that Riding was more beneficial to me under thoſe Circumſtances, than it would be to another, becauſe of thoſe Nervous Symptoms; yet how Particles ſo exquiſitely Pungent and Acrimonious, ſhould be retain'd and blunted and made uſeful, as appears from the Evil Conſequences of too many Evacuations; how this ſhould come about, but after ſuch a manner as I have above hinted, I cannot underſtand; 'tis eaſie for thoſe who think in haſt and ſuperficially, to be deceiv'd with the firſt appearance of things; but when once Men are calm enough, or under a Neceſſity to think cloſer, they are more likely to come to the Truth of ſuch *Phænomena* as theſe; and to thoſe who do allow themſelves to

deliberate before they are Positive, I doubt not but what I have asserted, will appear reasonable; and perhaps I should not be so much out of the way, if I should add, that some of the *Stercoraceous* parts of the Contents of the Intestines, are not in a strict Sence to be reckon'd Excrementitious or useless, since though I don't believe Digestion is perform'd by Putrefaction, yet I believe Putrefaction is a great Medium for the opening of Bodies, and the extracting inflammable Parts out of them; as we see a little Greenish *Hay*, when it comes to be Putrefied, shall become inflammable; and there being inflammable Particles in the Intestines, it is probable they may owe their Origine to some such Cause, and not to the first Chylification in the Ventricle. I would not be thought to bring these Reasons,

as

as if I believ'd Riding would Cure a Flux, I don't believe any ſuch thing, unleſs upon ſome very ſingular Circumſtances, and therefore I have not plac'd it among thoſe Diſtempers, which appear to be Curable by Exerciſe; but I only draw this Conſequence from the Palliative Relief, which Riding will afford in the time of a long Flux, that ſome pernicious and diſagreeable Particles, may receive ſuch an Alteration while in the Inteſtines, as to become fit to be re-abſorb'd by the ſeveral Veſſels of thoſe parts, and convey'd with great Advantage into the Blood again, which is making things to go on in a Round towards a Cure; Nature her ſelf doing the Work, without forcible Evacuations, which tho' never ſo gentle in ſome fine Conſtitutions, can ſcarce be born, and without much Phyſick,

the

the very Morbifick Matter being ſo alter'd and diſpos'd in one part of the Body, as to be uſeful in another. I have inſiſted the longer on this Point, that I might make it as plain as poſſible, becauſe I think it is of ſo great Moment in ſome Diſtempers and ſome Conſtitutions.

What relates to the Breaſt, I have had occaſion to Explain before; and for the Head, tho' I can't ſay it is ſo immediately affected by this Exerciſe, as the Lower Belly is, yet there is one Benefit accrues to it from Riding, which by reaſon of the Diſuſe of Exerciſe in Caſes of Sickneſs, is not taken Notice of, and it is this, the great inclination to Sleep, which a Sick Man finds if he lies down on his Bed as ſoon as he comes off his Horſe; for as the Motion of a Coach does more

or

or leſs diſpoſe all People to Sleep, and the ſwifter it goes, the more we are inclin'd to Doze; So the Motion of a Horſe being ſwifter, and the Poſture relax'd as to the Head and upper Parts, though a Man does not perceive any thing of ſuch an inclination, while he is Riding and upon his Guard, without any thing to lean on, yet there is ſo much of the Impreſſion of that Motion remains upon him, for ſometime after he lights off his Horſe, that if he throws himſelf preſently upon his Bed, eſpecially if he drinks ſome ſmall Draught of wholſome Ale or Wine firſt, he will quickly be in a Sleep, which upon ſeveral Accounts muſt then be very Beneficial; This is a Truth ſo certain and ſo valuable to diſtreſſed, infirm People, whoſe Nights are often more troubleſome than the Days, that it is a wonder what

what ſhould keep Men from attending to Nature, and falling into ſuch juſt Meaſures that Art it ſelf cannot afford. What can be more applicable to all the Circumſtances of Conſumptive People, than after that by Moderate Riding, they have diſpos'd the Humours for each Secretion, they ſhould by ſuch ſhort and Refreſhing Sleeps compleat thoſe Secretions? When moreover by theſe Means, they may be enabled to deny themſelves thoſe latter or Morning Sleeps, in which they are ſo apt to run into Colliquations; I know ſome may pleaſe to be ſo witty as to call this Nurſery, rather than a Management worthy of a Phyſician; but yet I will appeal to any that are Sober, Calm, and free from Prejudice, whether, if they allow that this Exerciſe does diſpoſe to Sleep as I affirm, upon

upon this Suppoſal, any thing can more exactly hit the miſerable Circumſtances of thoſe Perſons? To the Sick, theſe little things are of great Moment, and in ſuch ſeemingly little things as theſe, the Accurate Management of the Ancients conſiſted, by which they were ſometimes enabled to accompliſh, that which we, for want of thoſe Meaſures, do ſometimes fall ſhort of.

As to the other Property of this Exerciſe, it may be convenient for me to make ſome Apology, before I enter upon the Mention of it, becauſe it is ſuch, as cannot be well underſtood, but by thoſe who are Converſant with *Sanctorius*, upon one of whoſe above-mention'd Maxims it does depend, *viz.* Upon that which ſhews the great Increaſe of the inſenſible Perſpiration by *Pandiculation*

lation and Gauping; now I hope the taking Notice of this, will not be thought odd in an Age, of which it is one of the Good Qualities, that Men will not take up with the old ſuperficial Way of accounting for things by Occult Qualities, *Putredo's*, and the like, but enquire into the *Modus* of the more Abſtruſe Actions of Nature, and will be convinc'd, that whatever are the legitimate Meaſures that ſhe takes, they cannot be thought little or uncouth, ſeeing 'tis by ſuch *Minima*, that ſhe comes to be able to compleat her great Things. If therefore by Gauping, this Perſpiration is ſo very much promoted, as has been diſcover'd, and adjuſted by the Experiments of that Admirable Author, we may reflect upon how little things our Deliverance from Fevers, and other Inconveniences, does depend; nothing being more

more common upon taking Cold, Surfeits, or the like, than for People to Gaup often, till the offenſive Matter is let out, and conſequently it is very apparent, that whatſoever will promote the Pandiculation muſt be beneficial, when the Perſpiration is obſtructed; and this, though it cannot be effected by any Internal, may be done by Riding, which will diſpoſe all People, the Healthy as well as the Sick, more or leſs to it. I know it may be alledg'd, that all People when they are tyr'd, are more or leſs apt to Gaup and Retch, but yet it cannot be ſaid, that Thirty Miles Riding is a Tyring to a Healthy Man; and yet let any one obſerve, if that or leſs will not diſpoſe all People to this Affect, unleſs they over-rule it by Drinking of great Quantities of good Liquor, which I believe will

will not always ſuppreſs it neither; but for thoſe who are Sickly, the leaſt Uſe of this Exerciſe diſpoſes them to this Method of Nature, which perhaps no other Exerciſe will do, unleſs they are tyr'd by it; which ſhews how much Riding is preferable to other Exerciſes for Sick People, becauſe it does ſome way or other act upon the Secret Springs of Nature, after a more peculiar manner, and therefore more proper for the promoting that eaſie and even Evacuation.

There is another Property of Riding, that it always gives a Freſhneſs to the Countenance of thoſe who uſe it, which laſts for ſome time, and will appear upon but once Riding, and the weakeſt and moſt infirm Perſon ſhall diſcover ſomething of this in his Cheeks after this Exerciſe; now I would

would fain know, what Noble Cordial, whether Solid or Liquid, can do thus? They may cauſe a Fluſhing, but can produce nothing of this Natural Aſpect; and what can more plainly diſcover to us, that there is ſomething inimitable which reſults from the equal and gentle Preſſures of the innumerable and inviſible *Vaſcula* of the whole Body together, and that that Action which can produce ſuch an Appearance upon but one ſingle Application to it, may be ſufficient to diſplay the greateſt and moſt wholſome effects when continued on gradually, as it ought to be; and to object againſt the Certainty of theſe Meaſures, becauſe they muſt be ſlow, is juſt as Wiſe as it would be to aſſert, that the Hand of the Dial does not move, or the Budding Leaf encreaſe, becauſe we cannot diſcern the Motion of either of 'em.

Nothing certainly could keep us from Regarding theſe Tendencies of Nature, but the exceſſive Variety of Medicines, with which we are ſo gloz'd, that we over-look Her gradual Progreſſions, either to Sickneſs or Health, and think to force Her in all Caſes by the Power of Art; whereas in a great many Caſes, ſhe will baffle the boldeſt Adminiſtrators, when by gentle and ſuitable means ſhe may be reduc'd to her true State. The Famous *Cornaro*'s Caſe, and many others might be alledg'd to ſhew how great Changes may be procur'd, by a ſtrict attendance to the demands of Nature, and that it is ſeldom too late to aid Her in a Natural way, agreeable to her Weakneſs, and without the Oppreſſion, as I may call it at ſuch a time, inſtead of the Aſſiſtance, of much Phyſick.

Add

Add to all this the Vivacity, the Gayety which does always more or leſs reſult from brisk Motion, whether it is caus'd by the Spirits expanding themſelves, or the Fibres dilating themſelves to take in a great quantity of the Spirits, it is hard to determine, and perhaps of no great Conſequence if we could; but that I may repreſent the Senſe we may conceive of this, I think I have no reaſon to be aſham'd to borrow for once more an Illuſtration from that Noble Beaſt, to which this Exerciſe I am treating of is owing; It is a kown Caſe then, that if you take a Horſe of the beſt Spirit, and of the beſt Keeping, provided he is not Vicious, as they call it; if you mount this Horſe, and walk him or keep him to a pretty ſlow pace, you'll find him quiet enough, but if you once put him on to a larger Pace, he can't con-

tain himſelf, but will grow troubleſome, and preſs for a ſwifter Career, than perhaps his Rider would deſire; which plainly ſhews, that there is ſomething in the Animal Oeconomy, which *creſcit eundo*, which gathers by Motion, and which can't perhaps be made to diſplay it ſelf ſo well any other way; for this muſt not be thought to be wholly owing to high Feeding, but to the degree of the Motion; for the ſame Sprightlineſs or Courage will appear proportionably in any ſort of Motion: And but a ſlow Motion in ſome Caſes does not want its good Effects; thoſe who are Judges of the Art of War, tell us that it is not beſt for a Body of Men to ſtand ſtill and expect the Enemy, but to keep in Motion while they are drawing to the Battle; and in the time of a Siege, they make it a Rule, to remove their Men from one

Poſt

Poſt to another; that their Spirits may be kept up by their being in a continal Diverſion. We are as ſubject to the Impreſſions of Motion, as to thoſe of Sound and Harmony, and both are able ſometimes to inſpire a Flaſh of Courage into the Mind, that is not to be deſpis'd; and as one was of Uſe to drive away the Evil Spirit of Old, ſo the other may be of Service, to diſpel the Hypochondriack Cloud, the deſponding imaginations of Sick Perſons; a Man may be able by this means to rouze himſelf, and ſhake off the *Incubus* of the Brain, that lies brooding of Cauſeleſs Fears and Doubts, to the great hindrance of all his Endeavours after Health; it is no ſmall matter for a Perſon to hope and believe that he ſhall do well, it is ſome Advance towards a Cure to have ſo much Courage, Ἡν φόβος καὶ δυσθυμία, &c.

Si Metus & Triſtitia multo tempopore perſeverent, Melancholicum hoc ipſum; As *Hippocrates* obſerves in one of his *Aphoriſms* of his *fifth Section*, Fear and Sadneſs are ſufficient to create a Diſtemper, and therefore may be very well thought to obſtruct greatly the Cure of one; thoſe Paſſions cauſe the Motion of the Heart, and the Beat of the *Artery* to be weaker, and conſequently muſt proportionably leſſen inſenſible Perſpiration, which depends ſo much upon the Vigour of that Motion: We ſee a more than uſual Application to Buſineſs and Intenſneſs of Thought for but a few Days, ſhall cauſe an Alteration in the Countenance of a Healthful Man, and make him begin to look Pale and Wan; how much more then muſt it prejudice a Sick Man, to be always muſing on his Diſtemper, which he can hardly well forbear

nei-

neither, when he knows there is real Danger in his Caſe? But all this Anxiety will be very much prevented and interrupted by Riding, and a Man will naturally come to take heart and think well of his Caſe, when he finds he can procure ſuch Temporary or Periodical Relief, if I may ſo call it, ſuch intervals of Eaſe, as in the time of Riding, he is ſure more or leſs to enjoy.

Theſe things are ſo agreeable to Nature and Reaſon, that I am confident they can't but gain reception with thoſe who are acquainted with this Exerciſe; no Man can be an Enemy to Riding, but he who is ignorant of it; and the generality of Men are by their Employments and Affairs kept ſo much from the Practice of it, that they for the moſt part judge of it by what they have experienc'd on

a Journey, where an indifferent Horſe, bad Ways, and other Inconveniencies, make Riding rather a Toil than a Pleaſure: Whereas he who deſigns to make his Riding turn to account, muſt make it a Pleaſure; he muſt retire to ſome Place, where he can have the open Field for his Range, he muſt find out a Horſe that entirely ſuits his Humour, and then it will not be eaſie for him not to delight in a Creature which will perform all he expects from him, that takes Pleaſure in what he is put upon, and delights in his Rider; a Creature, which (conſidering the many other Beaſts that are Serviceable for Draught or Burden) ſeems to be made almoſt only for the Defence, the Pleaſure and Health of his Maſter; and which has ſo many excellent Qualities above all other Beaſts, that there is no Man upon Earth, whoſe Gravity

vity or Dignity is ſo great, as not to allow him with ſome Pleaſure to take Notice of 'em, if the Exerciſe alone will not ſatisfie; there is Variety of the Pleaſures of the Field, ſome of which any Man may make agreeable to his Humour; there is variety of Chace, both Violent and Moderate, a variety ſo great, that Providence ſeems to have appointed it to be ſubſervient to this Exerciſe, that Men may divert themſelves with Pleaſures, that will keep up the Vigour of the Mind, inſtead of thoſe ſoft Effeminate ones, which generally take place more or leſs, where this is laid aſide; add to all this the pleaſure a Man conceives when he finds his Health returning, which will make him delight in the means of his Recovery, and purſue with Cheerfulneſs that which before perhaps ſeem'd indifferent to him; ſo that

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an Active Life, when a Man has laid aside his timorous Prejudices, and is let into the taste of it, will be found not only to have its Advantages, but its Charms too; and he who indulges himself long in it, will think it not a Paradox, that there should be an Active Luxury, which may exceed all the Passive Enjoyments of Sloth and Indolence. I have insisted the more on the Pleasure as well as the Benefit of this Exercise, because there are some Constitutions of so fine a Make, or else so impair'd by some Hereditary Stain, that it must be slow and gentle means that can Act upon 'em to any purpose, and the taking Pleasure in those Means must greatly contribute to the Relief they are intended to give.

Tho' what I have said, may I hope carry Weight enough with it,

it, to convince any that will give themſelves leave to enquire into the Cauſes of things; yet becauſe Examples have ſo great a ſway with ſome, I ſhall add a few Inſtances of the Effects of this Exerciſe, and I ſhall firſt relate the Hiſtory of the Cure of Dr. *Seth Ward*, then Biſhop of *Salisbury*, which I have Tranſlated from Dr. *Sydenham*.

Noſtrorum quidem in Sacris Antiſtes, Vir Prudentia, &c. 'One of 'our Prelates, a Man Eminent for 'Wiſdom and Learning, after that 'he had for a long time given him-'ſelf intemperately to his Studies, 'and with the whole Streſs of his 'Mind, which in him is very great, 'apply'd himſelf too much to cloſe 'Thinking; he fell at length into 'the Hypochondriacal Diſtemper, 'which continuing a good while, 'all the Ferments of his Body were

'vitiated

'vitiated, and all the Digeſtions 'quite ſubverted. He had more 'than once gone thro' the Chaly-'beate Courſe, He had try'd al-'moſt all the Mineral Waters, with 'Purgings often repeated; as like-'wiſe Antiſcorbuticks of all kinds, 'and Teſtaceous Powders, in or-'der to the Sweetning of his Blood. 'Thus what with the Diſeaſe, and 'what with the Cure, continu'd 'for ſo many Years together, being 'juſt not quite deſtroy'd, he was 'ſeiz'd with the Colliquative *Diar-'rhœa*, which in the Conſumption, 'and other Chronical Diſtempers, 'when all the Digeſtions are quite 'ſpoil'd, is wont to be the Fore-'runner of Death: When he at 'length conſulted me, I preſently 'conſider'd, that there was no 'more place left for Medicines, 'ſince he had taken ſo many, and 'thoſe ſo efficacious to ſo little 'purpoſe; I advis'd him therefore

'for

'for the Reaſons above-mention'd,
'to commit himſelf wholly to Ri-
'ding for a Cure, beginning firſt
'with ſmall Stages, ſuch as were
'moſt ſuitable with ſo weak a Con-
'dition; in ſo much, that if he
'had not been of a peircing Judg-
'ment, that could diſcern the
'Reaſon of things, he would not
'have been induc'd, to try that
'ſort of Exerciſe. I deſir'd him
'to perſiſt daily in that Practice,
'till in his own Opinion he was
'well, encreaſing his Stages gra-
'dually every Day, till he could
'come to Ride as many Miles in a
'Day, as the more Prudent and
'Moderate Travellers uſually do
'in one Day, when upon the ac-
'count of their Affairs, they ſet
'out on a long Journey; that he
'ſhould not be ſollicitous as to
'what he Eat or Drank, or have
'any regard to the Weather; but
'that he ſhould like a Traveller,

'take

'take up with whatſoever he met 'with. To be ſhort, he ſet upon 'this Courſe, gradually Augmen-'ting the Diſtance of his Ridings, 'till at length he came to ride 'twenty, nay thirty Miles a Day; 'and as ſoon as he perceiv'd him-'ſelf better after a few Days tryal, 'he was Animated with the won-'derfulneſs of the Event, and per-'ſever'd in the ſame Courſe for 'ſome Months; in which ſpace of 'Time, he rode ſeveral Thouſand 'Miles, as he told me himſelf, 'until he was not only well, but 'had acquir'd a ſtrong and robuſt 'Habit of Body.

And Dr. *Sydenham*, tells us in the ſame place, that he Cur'd ſome of his Relations of Conſumptions, by putting 'em upon Riding much, of whom he ſays, that it was altogether out of the Power of Medicine to help 'em.

Cum

Cum certò ſciam me, vel Medicamentis quantivis pretii, aut aliâ Methodo, quæcunque demum ea fuerit, nihil magis iiſdem proficere potuiſſe, quam ſi multis verbis horatus fueram ut recte valerent.

A Clergyman, with whom I am acquainted, living in the Country, happen'd ſome Years ago, to fall into a lingring *Diarrhœa*, which hung upon him ſome Years, and eluded the force of the beſt Medicines of all ſorts, and brought him ſo low, that he had no hopes of Recovery left; when he was in this Condition, a Phyſician of the City advis'd him to try what Riding would do, not a ſlight tryal or two, but a cloſe application to it; and his Phyſician told me himſelf, that he charg'd him to keep to a brisk Motion, and gallop as much as he could, enjoyning withal a very

ſtrict

ſtrict Diet, that if the Diſeaſe ſhould be check'd by the Exerciſe, it might not by any improper Food, have occaſion to break out again. He ſet upon this Courſe in his own Grounds, which are very large and ſpacious, and by theſe means was reſtor'd to perfect Health again. 'Tis manifeſt, this Caſe was a Colliquative *Diarrhœa*, which at long run had ſunk all the Digeſtions and brought Nature into a kind of Univerſal Gleet, ſo that it came to be properly and ſolely the Object of Exerciſe; whereas a New *Diarrhœa* or Dyſentery, when the Humours are Turgid and Acrimonious, is ſolely the Object of Medicine, and ſo far from being to be Cur'd this way, that nothing would be more abſurd than to attempt it; for 'tis the debilitated Fibres that Exerciſe reſtores, and immediately affects; and whenever

ever Exerciſe makes an Alteration in the Fluids, it does ſo by the frequent Working and Conſtriction of the Fibres, which in a freſh *Diarrhœa*, before the Genuine Acrimony that occaſions it is ſpent, would be to no purpoſe.

A *Northamptonſhire* Gentleman, who about two Years and a half ago, came up to Town, and liv'd in *Hogſdon* Square, was taken Ill, and ſent for me; I found the chief thing he complain'd of was a Colick, but he had other Symptoms, which made me ſuſpect he was beginning to be Cachectick. He was averſe to much Phyſick, and took nothing but the *Elixir Salutis*, which gave him Eaſe, but he continued indiſpos'd; and ſeeing he was unwilling to take any more things, I advis'd him to ride out a little, he having a good Pad of his own breeding in the Town;

he told me, if he rode at all, he would ride Forty Mile; I reply'd, I thought a much leſs diſtance would ſerve, and indeed as much as I was for that Exerciſe, I thought five or ſix Miles would have tyr'd him; for he was much weakned, and his Arms trembled exceedingly, when he lifted them up, which was caus'd purely by the Diſtemper, for he was not given to drink. However, after I had ſtarted that Advice, he perſiſted in his Deſign, and in two or three Days ſet out and rode I think to *Bedford*, or thereabouts, Forty Mile in a Day, which, as he told me afterwards, made him ſo ſtiff, that he was laid up for five or ſix Days; but it ſtav'd off all thoſe Cachectick Symptoms that appear'd before, and in about a Month he return'd well to Town, and with ſo Florid a Countenance, that it could be owing to nothing

but

but that Exerciſe; and he continu'd ſo for near a Twelvemonth, when theſe Symptoms of an ill Habit of Body, which I clearly diſcern'd was begun, broke out again, and continue upon him ſtill. This Example may ſuffice to ſhew, that the Weakneſs which People commonly alledge for a Reaſon againſt Riding, is no Reaſon at all; it being, in ſome Senſe, their Weakneſs which makes it requiſite.

I will here likewiſe mention an Inſtance of the good Effects of Walking, the moſt common and unpromiſing Exerciſe; which I had from Dr. *Baynard*. About Twenty Yeras agoe a certain Gentleman came from the *Weſt-Indies* for the ſake of our Hot Bath, for the Cure of a Sort of Palſie, which was occaſion'd by the Dry-Gripes of that Country,

kind of *Colica Pictonum*, which if not cur'd in time, uſually terminates in a Palſie; This Gentleman got a Calaſh to carry him to the Bath; but it came into his Head, that he would by the way try to walk as much as he could, and when he found himſelf tyr'd would get into his Calaſh; upon this Attempt he found his Limbs come to him more and more every Day; and before he quite reach'd the Bath, he was perfectly well. And here it is remarkable, that *Bontius*, as great an Admirer as he was of fragrant Exoticks, in his *Medicina Indorum*, treating of a Sort of Palſie which ſome of the *Indians* call *Beriberii*, not much unlike to, if not the ſame with that I have lately mention'd, he makes it his firſt Rule in the Cure of that Diſtemper, That the Sick ſhould not give way to it, but ſet upon vigorous

gorus Exercise, *Sed hoc imprimis curandum est, ne (si ullo modo fieri possit) te lecto affigas decumbendo; sed vel ambulando, vel equitando, vel simili aliquo motu validiore omni conatu te exerceas.*

Dr. *Baynard* has likewise given me, in the following Letter, an Account of his Recovery from a Consumption, some Years agoe.

SIR,

IN Answer to your Request, concerning my Illness, as near as I can remember, I here give you in short the Matter of Fact. In the Month if October, Anno, 1694. *I was sent for to my old Friend and Acquaintance, Colonel* Warwick Bamfield, *at* Hardington *in* Somersetshire; *I being then in* London, *and had been very Ill all the Summer at* Bath; *my Case was, as I and other Physicians thought, a true and con-*

firm'd Phthiſis; *for I had an habitual Heat and continual Cough, Night and Day, a very quick and frequent Pulſe; I ſpit Blood, and exputed a viſcous tough Matter, ſometimes Green, Yellow, Aſh-colour'd, and that in great Quantity. It would ſink in Water, and ſmell ill and fœtid when caſt upon live Coals. My Fleſh went off, my Stomach decay'd, and I had that* Livor Genarum, *as tabid People uſually have, Night-Sweats,* &c. *So that every Body gave me over as loſt and gone; but through a conſtant and cool Regimen in Dyet, chiefly Milk and Apples, ſometimes with Honey and Sugar of Roſes, and a Diſtill'd Milk, with the temperate and cool Pectorals, together with conſtant Riding Night and Morning in the Air, and that on the higheſt Hills and Places I could find; I thank God, in two Months time my Hectic abated, Cough ceas'd, Fleſh came on, and my Stomach return'd; and by continuing*

ing Riding, and other Field-Exerciſes, I recover'd to a Miracle: And this preſent Year 1705. *falling into the ſame Diſtemper, I was cur'd by the ſame means, but chiefly Riding. This is very well known, and obſerved by all that knew me at the* Bath; *And I wiſh others, in my Caſe and Circumſtances, may find the like happy Succeſs. I am,*

DEAR SIR,

Your humble Servant,

Edw. Baynard.

I ſhall here inſert a Relation of a very ſtrange Cure by Riding, which was communicated to me by Dr. *Sydenham*, the Son of the Eminent Writer of that Name; who was likewiſe pleas'd to acquaint me, That he himſelf took a Journey into *Scotland*, that he might get rid of a Cough, which

ſeem'd to threaten a Conſumption, and that his Journey took it off. But the Cure I am going to mention, was of a Gentleman who is related to the Doctor, and now living in *Dorſetſhire*, who was brought ſo low by a Conſumption, that there ſeem'd to be no Poſſibility of a Recovery, either by Medicine or Exerciſe; but it being too late for the firſt to do any good, all that was to be done, was to be expected from the latter, though the Doctor did not think that Riding would then do. However the poor Gentleman, ſeeing there were no other Hopes left, was reſolv'd to attempt to ride into the Country; but was ſo extremely far gone, that at his ſetting out of Town, he was forc'd to be held up upon his Horſe by two Porters; and when he got to *Branford* or *Hounſlow*, the People of the Inn, into which he put,

were

were unwilling to receive him, as thinking he would die there, and they ſhould have the Trouble of a Funeral; but notwithſtanding he perſiſted in his Riding by ſmall Journeys to *Exeter*, and got ſo much Strength by the way, that tho' one Day his Horſe as he was drinking, lay down with him in the Water, and he was forc'd to ride part of the Day in that wet Condition, yet he got no Harm by it, but came to the abovemention'd place conſiderably recovered; where thinking he had then gain'd his Point, he neglected to ride any more for ſome time; but finding himſelf relapſing, he remember'd the Caution which Dr. *Sydenham* had given him at his ſetting out, That if he ſhould be ſo happy as to begin to recover, he ſhould not leave off Riding too ſoon, for he would infallibly relapſe and die, if he did not carry on

thoſe Meaſures long enough; ſo he betook himſelf to his Horſe again, and rode till he obtain'd a perfect Recovery.

And I have lately met with a Gentleman of this City, who upon the Advice of the ſame Phyſician, ſet upon a Courſe of Riding, and recovered of a Conſumption, in which he was very far advanc'd; and had try'd a Milk-Diet, and other proper means to no purpoſe, and all along ſpit Blood very much. This Gentleman ſet out on a Journey to *York*, and by Riding cloſe Day after Day for about Ten Weeks; in which ſpace of time, he rode by Computation a Thouſand Mile, he return'd healthy and well to Town.

It is to be conſider'd from theſe two laſt Caſes, that the Riding through Variety of Airs in a long Journey, is of great Conſequence to

to Conſumptive People, and is much better than riding conſtantly in one Air; beſides the new Scenes that appear every Day in a long Journey, create ſome ſort of Amuſement in the Minds of Sick Perſons, that is not to be thought altogether contemptible.

But I have been the more willing to inſert theſe two laſt Caſes, becauſe they do manifeſtly juſtifie that well-grounded Diſtinction, or as I think, I may rather call it, Diſcovery of that Excellent Phyſician, whom I have ſo often cited, *viz.* That it may be too late to force any one Secretion to good purpoſe; and yet it may not be too late to move all the Secretions of the Body at once, equally and gently by moderate Riding; which I doubt not will be found, by all who ſhall try it, to be a real Truth, and of the greateſt Importance,

portance, tho' it happens to be ſo difficult of Acceſs to the Underſtandings of ſome People, and ſo croſs to the Expectations of this Age, that there are Thouſands of *Naaman*'s Opinion to be found, who will chooſe to ſuffer any thing, rather than be convinc'd, that there can be ſo much Healing in the *Waters of Jordan*.

I could give ſeveral more Inſtances of this Nature; I could bring the Example of a Young Lady, the Heireſs of a very Eminent Family, who ow'd what eaſe ſhe had under a certain Diſtemper, chiefly to frequent Riding on Horſeback, and to whom the being put out of that Method prov'd Fatal, when Her ordinary Phyſician being out of the way, another, who miſtook her Caſe, took wrong Meaſures. But I only mention this, to ſhew that it may

may not be ſo incongruous a thing, and altogether without Precedent, to recommend theſe Meaſures in ſome preſſing Circumſtances, even to that tender Sex; who if they knew the ſurpriſing Advantages, that may ſometimes be obtain'd by this Exerciſe, would I doubt not break through the Mode to come at 'em. No Woman living would bear ſome of the ſeverer Hyſterick Symptoms, if ſhe knew any way to get rid of 'em; and I am widely miſtaken if ſome of thoſe Symptoms, do not as it were point out to us the cleareſt Indications for theſe Meaſures; as in thoſe Women who have been long diſtreſs'd and broke with this Diſtemper, we may obſerve ſometimes, that their Spirits are ſo ſcatter'd, or the Nerves ſo impair'd, that they can't well bear any thing that pleaſes, or diſpleaſes very much, without ſome diſorder;

diſorder; if they happen to deſire a Thing very earneſtly, they can't wait a little while for it, without ſome viſible uneaſineſs; and tho' they are ſenſible of this, and their Reaſon is as ſtrong as ever, yet they can't command themſelves, becauſe the Animal Spirits, the *Medium* by which the Rational Soul exerts it ſelf, are ſo broke and confounded. The ſame is likewiſe indicated by thoſe intenſe Hyſterick Shiverings, which ſometimes tho' more rarely are to be met with. Now if Women, who happen to be thus Tormented, believ'd that a Recourſe to this Exerciſe would relieve 'em, I leave it to any one to judge, whether they would diſpute the putting it in Practice.

What I have ſaid concerning Exerciſe, I hope may ſuffice to convince any Man, that the Pow-

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er of Healing is not confin'd to the Drug only, but that this courſe may come in for a ſhare alſo, and be eſteem'd upon a Level in due place with common Phyſick. And if I ſhould venture to ſay ſomething greater of it, I ſhould not ſpeak my own Fondneſs or Phancy, but the Opinion of one who is known to have been a very Ample Judge of the Demands of Nature, I mean Dr. *Sydenham*, with whoſe Encomium on this very Exerciſe, as he has given it us in his *Diſſertatio Epiſtolaris*, and his Treatiſe of the Gout, I ſhall conclude. In the firſt of thoſe above cited Places he has theſe Words. *At verò nihil ex omnibus quæ mihi hactenus innotu re, adeo impenſè ſanguinem ſpirituſque fovet firmatque, ac diu multumque ſingulis fere diebus Equo Vehi. Cum enim in hac Gymnaſticæ ſpecie impetus fermè omnis in Ventrem inferiorem*

feriorem fiat, in quo Vasa Excretoria (quotquot fæculentiis, in sanguinis massa stabulantibus, educendis à naturâ instituuntur) sita sint, quæ tanta functionum perversio, aliáve Organorum Naturalis impotentia vel fingi potest, cui tot succussionum millia eodem die ingeminata, idque, sub dio, opem non attulerint? Cujus Calidum innatum usq; adeò deferbuerit, ut hoc motu non excitetur & denuo effervescat? Quæ verò sive præternaturalis substantia, sive succus depravatus in aliquo harum partium sinu recondi potest, qui non hoc Corporis Exercitio, vel in statum naturæ consentaneum perducatur, vel quaquaversùm dissipetur elimineturque? Quid quod sanguis perpetuo hoc motu indefinenter agitatus ac permistus quasi renovatur ac vigescit. And in his Treatise of the Gout, he thus expresses himself with some Exultation. *Sanè diu multumq; mecum reputavi, quod si cui innotesceret Medicamentum, quòd*

& celare vellet, æquè efficax in hoc Morbo (ſcilicet Podagrâ) *ut & in Chronicis pleriſque, ac eſt Equitatio conſtans & aſſidua, opes ille exinde ampliſſimas facilè accumulare poſſet.*

OF

CHAFING.

THE next I ſhall recommend, is a Cutaneous Exerciſe; *Chafing of the Skin*, or as we uſually call it, the Uſe of the *Fleſh-Bruſh*. It is very ſtrange that this Exerciſe, which was in ſuch univerſal requeſt among the Ancients, of which they have wrote ſo copiouſly, have given us ſo many Rules and Diſtinctions for the uſe of it, which they put in Practice, in almoſt all Diſtempers, and without which, ſcarce any Man of tolerable Circumſtances paſs'd a day, either in Sickneſs or in Health; I ſay, it is ſtrange, that what was

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ſo much eſteem'd by them, ſhould be ſo totally neglected and ſlighted by us, eſpecially when we conſider that their Experience agrees ſo exactly with our Modern Diſcoveries in the Oeconomy of Nature, *viz.* That there is ſo great a diſproportion between the Evacuations perform'd by the Skin inſenſibly, and all the others put together; that the firſt exceeds all the reſt by many Ounces. One would be apt to think, that this Theory ſhould convince us, that the Ancients did find their Account in thoſe diligent Frictions, and that they really anſwer'd their Expectations in the ſeveral Caſes, in which they made uſe of them; and that we, who live in a Colder Climate, have much more reaſon to expect great advantages from this Method, if we would uſe it to ſome purpoſe; with Continuation and cloſe Repititi-

on. If a Perſon happens to be a little more coſtive than ordinary, what a Concern is he in for it? What Doſes of Purging Phyſick are repeated to take off this ſuppos'd Evil; which at the ſame time is frequently obviated by a larger *Diaphoreſis*, which at ſuch times is often ſenſible in the Palms of the Hands, and very often not ſenſible, but yet real, and to the greater Benefit of the Perſon, than a Laxity of the Inteſtines would have been. But if ſix or eight Ounces of the *Materia Perſpirabilis* is kept in, which is of far worſe Conſequence, than the like Weight of the *Fæces*; no Body is very ſolicitous about that: And if it diſcover it ſelf in a Cold or Head-ach, preſently there is Recourſe to Purgatives; and if it be the Summer time, perhaps the Purging Waters are drank ſo long *de die in diem*,

diem, till Nature loſe the way ſhe has been accuſtom'd to; and perhaps never comes to be able to make the ſame Diſcharges for Quantity by inſenſible Perſpiration, as ſhe did before ſhe was thus violently forc'd out of her way. This was not the way of the Ancients, they were for ſtimulating and ſoliciting that part which was primarily defective, that they might reduce it to an Ability to make its wonted Diſcharges; ſo that where ther· is a great Lett of inſenſible Perſpiration, which in ſome Caſes is eaſily diſcover'd by the Smoothneſs and Dryneſs of the Hands, it is certainly moſt natural to endeavour to ſtimulate the Glands of the Skin by rubbing; which by the Colour it brings into the Skin, ſufficiently ſhews what it is able to do, if us'd long enough. And certainly we ought to have re-

gard to this ſort of Diſcharge above others, becauſe it can ſupply the Defect of others, better than any of the others can ſupply the Defect of this; and becauſe it is perform'd by thoſe Veſſels, which are by all now allowed to be the grand Emunctory of the Body, that is, by the true Skin, and all its innumerable Glands.

Theſe Reaſons are ſo Natural, that I can't imagine what ſhould have hinder'd the putting this Method in Practice in ſome Caſes at leaſt, unleſs it be, what I have ſomewhere obſerv'd before, the general Impatience of moſt People, who can't be brought to think well of a Method which does not ſurpize with ſome preſent Alteration, without conſidering, that if ſuch a Method will after a time cauſe a good Alteration,

tion, it is worth their while to wait for it, and perhaps the beſt Courſe that the Nature of the Caſe will admit of. Now that the Efficacy of a *general Chafing* may be made to appear ſo valuable, as to encourage any one to wait for the Effects of it, let us but conſider it in a particular familiar Caſe, which is the Cure of a *Ganglion*, a Tumour in a Tendon, occaſion'd by ſome extravaſated Juices between the Coats. This little white Swelling is commonly taken off by frequent Rubbing; and tho' no Alteration appear for a Week or two, yet if you perſiſt longer, it certainly vaniſhes; which plainly ſhews, that if *Chafing* can produce ſuch an Effect, in a Part which is cold, and comparatively exanguous, what may we not expect from it, when apply'd to the *Cutis*, which is ſo warm and ſucculent, and

ready to give forth ſuch copious Exhalations? This Inſtance, in my Opinion, does ſufficiently illuſtrate the thing, tho' we ſee the good Effect of it in another Caſe too, *viz.* The *Rickets*, which is caus'd by the neglect of exerciſing and *Chafing* the Limbs of the Child, and which every Nurſe knows may be Cur'd by ſo doing, if it has not been of long Continuance; or at leaſt that thoſe Exerciſes are equally prevalent with all the Internal Adminiſtrations.

If theſe things are ſo, why ſhould not we carry on this Method to ſome of the other Caſes too? Why ſhould not we go to work even in a true Rheumatiſm, after the Inflammation is abated; to fetch out the *Mucous Gelatinous* Subſtance, which has been thrown out into the *Interſtices* of the Muſcles? This Courſe would mould and

and break that Viſcous Matter, and render it more fit to be abſorb'd and carry'd off, or diſcuſs'd, by dilating the Membranes, and making 'em more fit for a Tranſpiration; and withal would ſecure the Cutaneous Parts, from too great a Flaccidity, by keeping up the Spring of the ſmall Fibres; whereas warm Fomentations, tho' they procure a wonderful Tranſpiration, yet they are apt to leave the part relaxed, and ſodden in a manner, if they are apply'd too often; and thus it is eaſie to imagine, how proper this Courſe is in the other Nervous Scorbutick Rheumatiſm, and what good Effect it will produce, if us'd with Diſcretion, at proper Seaſons; with other Exerciſes likewiſe.

There are moreover ſome *Atrophies*, where this is like to prove of ſingular Uſe, by reaſon of the

σύγκρισις (as *Galen* calls it, in his third Book, *de Sanitate Tuendâ*) the dryneſs and ſtiffneſs of the Skin, which at that time, ſeems to be fix'd to the part that it covers, and not to ſit looſe as at other times, and the Pores are obſtructed, and the Skin of a different Hue, from what it is in moſt other Caſes. Here it's eaſie to perceive that *Chafing* muſt be of wonderful conſequence, the reaſon of which *Galen* gives in a Chapter or two in the abovementioned Book, where he Treats expreſly of this very Affect.

Laſtly, It muſt needs be very beneficial to thoſe Hyſterical and Hypochondriacal People, who are very Fat; and upon that account, cannot uſe much Exerciſe, and have reaſon to be cautious, how they venture into the Cold Bath; and therefore I have not perfunctorily

rily advanc'd this Method, where I have already treated of that Caſe, but upon good grounds; as theſe People can't well bear any of the ſenſible *Evacuations*, it is but neceſſary we ſhould have recourſe to the promotion of the inſenſible one; and perhaps if we knew the true Cauſe of that Diſtemper, it would be found to ariſe in great part, from ſome Lett in that inſenſible Perſpiration, and therefore it would be proper to endeavour the Removal of ſuch an Obſtruction by outward Means, becauſe ſo few internal Ones are agreeable; and if any one thinks the Breathing, that is caus'd by *Chafing*, too trivial to be call'd an Evacuation, they may be fully inform'd out of *Hippocrates* and *Galen*, that they thought it to deſerve that Name, and therefore they diſtinguiſh'd one degree of it for attenuating of groſs Bodies.

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If therefore this can be brought to appear a ſufficient Evacuation for theſe People, it is certain it is moſt conducive upon other accounts; becauſe it raiſes and cheriſhes the Spirits at the ſame time. Upon this account of refreſhing the Spirits, the Ancients made it a great part of their Ἀναθεραπία, that is, their Method for refreſhing *Athleticks*, after their violent Exerciſes; and every Old Woman now among us, falls to rubbing the Limbs of any Body that happens to be taken with an Hyſterick Fit, for it diverts the Spirits from flowing too much to the Parts affected, and long acting upon the Extremity of thoſe moſt ſenſible Fibres of the Skin, muſt needs agitate the Spirits conſiderably, and give ſome Strength likewiſe to thoſe Parts that are ſo *Chafed*.

A great deal more might be added on this neglected Subject; but I think I have ſaid enough to prove what I above aſſerted, *viz.* The exquiſite Agreement, between the Practice of the Ancients, and our Theory of the *Cutaneous* Parts; and if this will not encourage any to hope for the like Advantage from the ſame Methods now in our Days, nothing that I can ſay more will avail.

Of

Of being Exercis'd to bear COLD.

THE next and laſt *Gymnaſtick* Method I proceed to, is the Uſe of the *Cold Bath*; if any ſhould wonder to find me rank this among the ſeveral ſorts of Exerciſe, they may conſider, that it was ever reputed for one among the Ancients, and not without Reaſon; ſince it makes the Spirits recoil, and act with more united Vigour, upon the Subject-matter of the Diſeaſe, and ſo a Cure may be made by them alone, without any Medicinal Virtue, receiv'd through the Pores, as in other outward and Topical Applications; this comes up to the Notion of an Exerciſe, becauſe

becauſe it enables Nature to accompliſh the Work of Healing her ſelf.

I ſhall not attempt to account for the Advantages of this Practice, becauſe that has been done already ſo copiouſly by Sir *John Floyer* and Dr. *Baynard*, and the World has already begun to experience the good Effects of it, and there are Examples enough, every where known, to juſtifie the recourſe to it, in the Caſes to which I apply it; and 'tis to be hop'd now, that Men will begin to conſider the Folly and Miſchief of the too warm Regimen, which in health does often prepare 'em for Sickneſs, and in Sickneſs does often increaſe the Diſeaſe, and haſten Death, a Regimen which would be much more proper, for one that is to have a ſudden paſſage into a warm Country, than

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for us who are to prepare our ſelves for the bearing of the Cold; a thing which we cannot fly from; and therefore ought to reſiſt it; and which is not ſo formidable or dangerous, as for a great while has been thought. The Inhabitants of this Nation formerly went Naked, and were more Healthy than we are now; and the People of *Canada*, and all the Cold Continent behind *Newfoundland*, go much after the ſame manner, without any Inconvenience from it, but are rather fortified againſt the Accidents they would be ſubject to, if their Pores were too much open'd and relax'd by too much warmth; and we may very well diſtinguiſh the Rational, from the Savage Part, by as thin a Habit as Decency will permit. It is a ſtrange thing, that People ſhould be fond of ſuppling their Skins, and keeping their Pores too

open

open; as if a Man did not as really perſpire, when there is no ſenſible Moiſture upon the Skin, tho' not ſo much, as when he is all bedew'd with Exhalations, which ſhould not be ſent out in ſo great Quantity, but upon brisk Exerciſe. If Men knew how much Sweat impairs the Skin, and inclines it to wrinkle, as *Sanctorius* tells us in one of his *Aphoriſms*, they would be fully perſwaded, that Nature can make her Diſcharges by finer and better ways, than thoſe which are ſo perceptible, and that Flannel is ſcarce neceſſary or convenient on this ſide old Age. The nervous parts of the Skin have certainly a very great Elaſticity, and are capable of being ſtrengthned by good and ſuitable Management, even to a Habit, as well as thoſe of other Parts; and we ſee, that when the Glands of the Skin do throw out a very

ſenſible quantity of Sweat in ſome particular Parts, theſe Parts grow accuſtom'd to the Air, or other Moiſture, and receive little or no hindrance in their diſcharges from it; as we ſee the Palms of the Hands ſhall ſweat copiouſly, notwithſtanding the External Air immediately ſtriking upon 'em; and none are more Strong and Healthy, than thoſe who are wont to have their Feet wet without changing their Shooes and Stockings for it. The Stomach, plac'd in the midſt of the Body, and conſequently exquiſitely warm, is ſo adapted, as to bear large Draughts of the Coldeſt Liquor, without the leaſt Damage, unleſs the Body has been extremely heated; and tho' its Office ſeems to require great and continual Heat, yet it is not obſtructed in it, by the admiſſion of Cold things, nor are its Glands benumn'd or conſtring'd,

ſo as to hinder the Secretion of digeſting Juices; and can we ſuppoſe the Fabrick of the Skin leſs perfect, and exquiſite, when by its poſition it is to be immediately ſubject to the effects of the External Air? Can we think its Veſſels are not endu'd with a ſtrength ſufficient to anſwer the Force and Weight of the incumbent Air? And its Glands of ſuch a make, as that the Particles they ſtrain ſhall be of ſo fine a Texture as to paſs the Skin, when it ſeems to us to be too cloſe to permit any tranſition? We make but indifferent uſe of a very good Theory, that *Sanctorius* has furniſh'd us with, if we give way to theſe Thoughts, and encourage too frequently the promoting of Senſible Perſpirations; which, be they in never ſo ſmall a degree, are the effect of ſome Violence upon Nature, and conſequently not to be compar'd with the other

more Even and Regular Secretion.

Beſides, we may argue from the Effects of too much Heat, and from the Diſtempers of Hot Countries, to inſtance but in one Diſeaſe (which when it ſeizes any one among us, their chiefeſt Care is to be ſecur'd from the Cold,) and that is the Colick, which is the Epidemical Diſtemper of Hot Countries, not of Cold, and ſo common at *Surat*, that about Noon the whole Town ſhall ſmell of *Aſſa Fœtida*, which they mix in moſt of their Diſhes, to preſerve 'em from that Tormenting Diſtemper, which the Heat of the Air does not exempt 'em from, but expoſes 'em to it, by rarefying the Blood and Humours, and opening their Pores; by which Method I don't doubt but many a one among us has brought an Accidental Colick to be habitual; for being

ing ſcar'd by the firſt Fit, they have endeavour'd to ſecure themſelves from another, by theſe very Means which prove moſt likely to bring it on. If any one thinks this ſtrange, let them remember what hapned when Muffs were worn univerſally, ſome Men were wont to let them hang upon their Bellies for the moſt part; and I have heard a Healthy Man complain, that upon leaving off his Muff for a day or two after ſuch a Cuſtom, he has been grip'd; from which any one in the World will infer, that the keeping the Part two warm, prepar'd it for the Ill Effect of the Air, and that the ſame may happen in any part of the whole Body; ſo that it is a Folly for People, in moſt Caſes where the Lungs are not concern'd, to nurſe up a Diſtemper, which was at firſt perhaps in great part owing to a tender way of living, and by

continuing that Courſe of Life, muſt be rather encreas'd than perfectly rooted out. A great deal more might be urg'd, if my Scope would permit me, to induce People to believe the good Effects that will follow upon the Exerciſing themſelves in bearing *Cold*.

I ſhall proceed next to ſhew, what was the Opinion of the Antients, concerning Exerciſe in the Cure of ſeveral Diſtempers, and ſhall collect their Sentiments as briefly as poſſible; that as in a Sketch they may appear at one View.

The PRACTICE *of the* ANCIENTS.

WE find then that much about the time of *Hippocrates*, the *Gymnaſtick* Method began to be introduc'd into the Art of Phyſick; whether it was brought up by the School of the *Cnidians*, or any other Society of Phyſicians, or whether *Herodicus* firſt joyn'd it to the Dietetick, and ſo brought it into Requeſt, I ſhall not undertake to determine; but we find by *Hippocrates*, in his *third* Book, *de Dietâ*, *Sect.* 12. That with ſome ſort of Glory he aſſumes to himſelf the Honour of bringing that Method to a Perfection, ſo as to be able to diſtinguiſh Πότερον τὸ σιτίον κρατέει τὸς πόνους, ἢ οἱ πόνοι τὰ σιτία, ἢ μέτριως

μέτριως ἔχει πρὸς ἄλληλα. *Utrum cibus ſuperat labores, aut labores cibos, aut moderatè inter ſe habeant*; as he expreſſes it. Purſuant to this, we find him in ſeveral places of his Works, recommending ſeveral Sorts of Exerciſes upon proper Occaſions; as *firſt*, Friction or *Chafing*, the Effects of which he explains in his *Second* Book, *de Diæta*, *Sect.* 42. And tells us, that as in ſome Caſes it will bring down the Bloatedneſs of the Solid Parts, in other Caſes it will incarn and cauſe an Increaſe of Fleſh, and make the part Thrive; for, ſays he, *Carnes Calefactæ ac ſiccatæ alimentum in ſeipſas per venas trahunt, deinde augeſcunt.* He adviſes Walking, of which they had two Sorts, their round and ſtreight Courſes. He gives his Opinion of the Ἀναπνεύματα, or Preparatory Exerciſes, which ſerv'd to warm and fit the Wreſtlers for the more vehement

hement ones. In ſome Caſes he adviſes, the Παλὴ, or common Wreſtling, and the Ἀκροχείρησις, or Wreſtling by the Hands only, without coming cloſe. The Κωρυχομαχία, or the Exerciſe of the *Corycus*, or the hanging Ball. The Χειρονομία, a Sort of dextrous and regular Motion of the Hands, and upper parts of the Body, ſomething after a Military manner. The Ἀλίνδησις, or rowling in Sand; and once we find mention'd with ſome Approbation the Ἤπειροι Ἵπποι, *Equi Indefiniti*, by which I ſuppoſe he means Galloping, long Courſes in the open Field. Theſe various Exerciſes are more amply deſcrib'd by ſeveral Authors, and *Mercurialis* has Collected a very good account of 'em; they may ſeem ſtrange to thoſe who don't conſider what great Expences the Ancients were at in Building Academies, or Places every way convenient for theſe purpoſes;

purpoſes; and as odd as ſome of theſe may be thought by us now, they were as commonly practis'd in thoſe Days, as Cupping is now in our *Bagnio's*. And tho' *Hippocrates* gives his Direction concerning theſe things, after his uſual manner, in ſhort Terms, yet 'tis plain he depended much on 'em, becauſe he ſo frequently inculcates the Diſtinction of this or that ſort of Exerciſe, to ſuch and ſuch a Diſtemper; and the People of thoſe Times might find greater Benefit from thoſe Exerciſes, than we do now from ſome of ours, which I doubt not are altogether as good; becauſe they apply'd the Exerciſe to ſuch or ſuch a Medicine as the Phyſician thought fit, which gave it a greater Energy; and after its Operation had recourſe to another milder Method, to take off the Heat or Diſorder which might have been caus'd by the

the Medicine. In theſe Practices they were ſo dexterous and ſucceſsful, that tho' their Ætiology ſtrictly taken, was wrong, yet if a Man diligently attends to their Reaſoning from Effects, he may be ſatisfied, that they were able by theſe Methods to do ſome wonderful Cures; and indeed they ſometimes had ſuch ſurprizing Succeſs, that the abovemention'd *Herodicus*, an Eminent Maſter of Exerciſes, thought he could Cure all Diſtempers by thoſe Means, and went Empirically to work upon the Bodies of thoſe who put themſelves under his Care, and was ſo extravagant, as to attempt to Cure Fevers by ſuch Methods, for which he is ridicul'd by *Hippocrates*, in the *Sixth Book* of his *Epidemicks*, and the *Third Section*.

As

As for *Galen*, he follows *Hippocrates* in this, as close as in other things, and declares his Opinion of the Benefit of Exercises in several places; his *Second* Book, *de Sanitate Tuendâ*, is wholly upon the Use of the *Strigil*, or the Advantage of Regular *Chafing*; he has wrote a little Tract, *de Parvâ Pilâ*, wherein he recommends an Exercise, by which the Body and Mind are both at the same time affected. In his Discourse to *Thrasibulus*, which is a Dispute, whether the Preservation of the Health properly belongs to the Art of Physick, or to the Gymnastick Art, he inveighs against the *Athletick*, and other violent Practices of the *Gymnasium*, but appoves of the more moderate Exercises, as subvervient to the Ends of a Physician, and consequently part of that Art.

The

The other *Greek* Writers ſpeak much the ſame thing, and the Senſe of moſt of 'em in this Matter is contracted in *Oribaſius*'s Collections. I ſhall only take Notice that they rely'd much on Exerciſe in the Cure of the *Dropſie*, wherein we almoſt totally neglect it; *Porrò motus, ſi quid aliud* (ſays *Trallian*, one of the lateſt of 'em) *Hydropicis conducit, præcipuè qui fit per Mare, Equum, & Lecticam iis autem qui viribus conſtant, etiam Itio eſt utiliſſima*; which is no more than what *Hippocrates* has adviſ'd before, in his *de internis Affection. Sect.* 28. He orders for one that has a Dropſie παλαιστρεέτω περιόδοισι πολλοῖσι δι' ἡμέρης, *Laboret circuitus multos de die.* And he makes uſe of the ſame Word in his Epidemicks, and almoſt always when he ſpeaks of the Regimen of a Dropical Perſon, implying that though it be a labour

labour for ſuch People to move, yet they muſt undergo it; and this is ſo much the Senſe of *Hippocrates*, that Monſ. *Spon* has Collected it into one of the New *Aphoriſms*, which he has drawn out of his Works. *Celſus* ſays of this Caſe, *Concutiendum multâ Geſtatione Corpus eſt*; and in another place, *Facilius in Servis quàm in Liberis tollitur, quia cum deſideret famem, ſitim, mille alia tædia, longamq; patientiam, promptius his ſuccurritur, qui facilè coguntur, quam quibus inutilis libertas eſt.* I have made choice of theſe Citations, that I may not be thought to have apply'd the Uſe of Exerciſe to the Cure of the Dropſie, without Precedent; and if the Ancients in their Practice found the good Effects of it, we have much more reaſon to expect greater Advantage from ſuch Meaſures, ſince we have a Medicine we uſe in this Caſe, which ſeems parti-

particularly to demand it; I mean the Chalybeate, of which I have already ſpoke elſewhere.

But to return to my former Deſign; not only the *Greeks* but the *Latin* Writers alſo, are full of theſe Methods. The *Romans* rather exceeded, than came ſhort of the *Greeks*, in the Proſecution of *Gymnaſtick* Courſes; and *Aſclepiades*, who liv'd in the Time of *Pompey* the Great, was the Man who brought them into the moſt Univerſal Requeſt. He called Exerciſes *the common Aids of Phyſick*, and wrote a Treatiſe, *De Frictione, & Geſtatione*, which is mention'd by *Celſus*, in his Chapter *de Frictione*, but the Book is loſt. He carry'd theſe Notions ſo far, that he invented the *Lecti Penſiles*, or Hanging Beds, that the Sick might be rock'd to ſleep; which took ſo much at that time, that

that they came afterwards to make these Beds of Silver, and they were a great part of the Luxury of that People; he had so many particular ways to make Physick agreeable, understood so well the Τὸ Βέλπον of his Profession, was so exquisite in the invention of Exercises to supply the Place of much Physick, that perhaps no Man in any Age ever had the happiness to obtain so general an Applause, and *Pliny* says, he by these means made himself the Delight of Mankind.

About his Time the *Roman* Physicians sent their Consumptive Patients to *Alexandria* in *Ægypt*, and with very good Success, as we find by both the *Pliny's*; this was done partly for the Change of Air, but chiefly for the Sake of the Exercise by the Motion of the Ship, and therefore *Celsus* says,

Si

Si vera Phthiſis eſt, opus eſt longâ Navigatione; and a little after he makes *Vehiculum & Navis* to be two of the chiefeſt Remedies; and I am apt to believe they were the more inclin'd to make uſe of the Sea-Carriage, as an Exerciſe, for the ſake of the Vomiting, which happens at the Beginning of it, that they might thereby ſupply their want of gentle Emeticks, which at times are ſo beneficial in that Diſtemper, in which ſcarce any of the Emeticks which they then knew, can be us'd with Safety, and it was a great part of their Induſtry and Sagacity to make good what they wanted in Pharmacy by other Means. As for the other more common Exerciſes, they were daily practis'd, as it is very manifeſt from *Celſus*, *Cælius Aurelianus*, *Theodorus*, *Priſcianus*, and the reſt of the *Latin* Phyſicians. And we don't want Inſtances of

the Cures wrought by theſe means. *Suetonius* tells us, that *Germanicus* was Cur'd of a *Crurum Gracilitas*, as he expreſſes it, I ſuppoſe he means an *Atrophy*, by Riding; and *Plutarch* in the Life of *Tully* gives us an Account of his Infirmneſs, and that he recover'd a great Meaſure of Health by Travelling and exceſſive Diligence in Rubbing and *Chafing* his Body; and he himſelf in his *Brutus, ſeu de claris Oratoribus*, relates his Caſe, That he was ſo weak, that his Friends and Phyſicians advis'd him to leave off Pleading, which ſtruck him ſo, that he thought he would undergo any Fatigue, rather than loſe the Glory of his Profeſſion, and ſo betook himſelf to Travelling, which with other regular Courſes brought him to his Health again. *Pliny, Lib.* 31. *Cap.* 6. tells us *Annæas Gallio*, who had been Conſul,

Conſul, was Cured of a Conſumption by a Sea Voyage; and *Galen* gives us ſuch Accounts of the good Effects of particular Exerciſes, and all People ſo unanimouſly apply'd themſelves with Patience and Reſolution to theſe Practices, that it cannot be ſuppos'd, but they muſt have been able to produce great and good Effects.

If any one ſhould ask me, how it comes to paſs that Riding, which I have ſubſtituted as equivalent to any or all the Exerciſes of the Ancients, in the Caſe of Sickneſs, was ſo little regarded by their Phyſicians, but other leſs valuable Exerciſes inſiſted on; it may be reply'd, That the Ancients could not recommend Riding to weak People, becauſe of their manner of Riding; they had not the ſame convenience as we have;

for in thoſe Days they rode without Stirrups, which muſt needs be tireſome to weak Perſons. We find by comparing of Medals, that the Stirrup was an Invention of a much later date, than any of the Authors I have quoted, I think by about Seven Hundred Years; ſo that Riding was only an Exerciſe for Healthy and ſtrong Men; beſides Horſes were not ſo common in the *Levant*, or in *Italy*, as they are with us; they were reſerv'd for Military Men, or at leaſt for Men of Plentiful Fortunes, and the Aſs and the Mule ſerv'd for common Carriage; the Horſe was a formidable Creature to People that were not accuſtom'd to him, and eſpecially to weak Perſons. We ſee ſuch a Jolly Fellow as *Martial*, could adviſe his Friend *Priſcus*, to have a Care how he hunted, *Lib.* 12. *Epig* 14.

Parcius

Parcius utaris, moneo, rapiente Veredo
Priſce, nec in Lepores tam violenter eas.

And in the Cloſe of the Epigram,

Quid te fræna juvant temeraria! Sæpius illis,
Priſce, datum eſt Equitem rumpere, quam Leporem.

And that this Humour ſtill remains in thoſe Countries, tho' we have a better way of Riding, is evident from Dr. *Baglivi*, who tells us in the *Corollaries* of the 8*th* Chapter of his *firſt* Book, *de Fib. Motrice*, That he Cur'd two Hypochondriacal Perſons, *Hominem Nobilem ac alium Divitem*, a Gentleman and another rich Man, that he ſays were deſperately Ill, by Riding on Aſſes in the Country Air; and I believe all will agree to think they were deſperately Ill, who could deſpenſe with the

Aſs-trot. when their Circumſtances would have afforded them the Carriage of a better Creature. The *Italians* plainly diſcover likewiſe, how little they are addicted to Horſemanſhip, in that Proverb of theirs which ſays, *That a Galloping Horſe is an open Sepulchre*; and according to this Opinion, they manage their Horſe-Races at *Florence*, for they make their Horſes run without Riders upon 'em, ſomething after the manner of a Paddock-Courſe; and to make 'em run the faſter, they clap a Saddle upon 'em, cover'd with a Sort of Tinſey Stuff, that may make a fluttring with the Motion of the Horſe, and fright him that he may run the faſter; and inſtead of Stirrups, there hangs down Straps from the Saddle, at the end of which, there are Balls full of ſharp Spikes, which leap up and down, and prick the Horſe

as he runs. This ridiculous way of Running their Horſes, ſhews how great is the Prevalence of that habitual Timorouſneſs, which keeps 'em from the Enjoyment of the beſt and moſt uſeful ſort of Riding, as the Ancients could diſtinguiſh very well, as we find by *Oribaſius*, in his Chapter *de Equitatione*, who after he has ſaid, that Riding ſlowly was tireſome, (which was for want of Stirrups) he goes on to tell you, *Si vehementer impellatur* (*viz.* Equus) *quamvis totum corpus laborioſè concutiat, tamen aliquid utilitatis affert, ſiquidem magis quam omnes aliæ Exercitationes, Corpus & præſertim Stomachum firmat, & ſenſuum inſtrumenta purgat, eaque reddit acutiora.* This is a ſufficient *Encomium* of Riding, coming from the Mouth of one of the Ancients, who relied ſo much upon other Exerciſes, tho' we in theſe Northern Parts want no Recom-

mendation from them, of a thing ſo much experienc'd by our ſelves; only we ſlight and neglect this Advantage, as we do many others, becauſe it is common.

I have now with ſufficient Brevity, conſider'd how much the Ancients depended on the Aſſiſtance of Exerciſes in their Practice; and I leave it to any one, that is not prejudic'd, to judge whether this may not paſs for one Reaſon, why they cur'd ſo well with ſo bad a Theory, and ſuch indifferent Materials; when we, with our Circulation and Splendid Pharmacy, are not perhaps able to outdo 'em proportionably to our larger Acquiſition of Knowledge; I ſay, I think this may be one Reaſon, for I know there is another may be alledg'd likewiſe, and I think I ſpeak without any undue Aggravation.

The

The Power of Exerciſes us'd at proper Seaſons, and with great and exact Patience, muſt needs be very great; and if it be true, that in the *Roman* Common Wealth there was no profeſs'd Phyſician for the firſt Five Hundred Years, there is no way to account for it but by their incredible Temperance, and Variety of Exerciſes; the few Chronical Diſtempers they had among them, were in all likelyhood, for the moſt part ſubſequent to Acute Diſtempers, which no Temperance can always prevent, and the little vegetable Phyſick, which they could not but know, with their reſolute and indefatigable Application to ſome of their Exerciſes, might ſuffice to help 'em to get clear of 'em. This may perhaps by ſome be thought rather a Gloſs than an Argument, who do not duly conſider their wonderful Patience in

this

this reſpect; the *Pletheriſmus*, and *Pityliſmus*, two odd uncouth Exerciſes mention'd by *Galen*, are ſufficient to convince any Man, that they that would heartily drudge at them in the middle of the *Stadium*, would do any thing that was poſſible to recover their Health, and might expect the very utmoſt Benefit that could be obtain'd from the various Motion of the whole, or any part of the Body.

I will grant, that they carried theſe things too far, the whole Education of the *Athletæ* was blameable; I will grant likewiſe that they were too nice in the Exerciſes for the Preſervation of Health; I can't admire *Pliny*'s Courſe of Life, which he gives us an Account of in the *Thirty ſixth Epiſtle* of his *Ninth* Book. *Ubi hora quarta vel quinta (neque enim certum*

certum dimenſumque tempus) ut dies ſuaſit, in Xyſtum me, vel Cryptoporticum confero, reliqua meditor & dicto, vehiculum aſcendo, ibi quoque idem quòd ambulans, aut jacens, durat intenſio, mutatione ipſa refecta paulum redormio, deinde ambulo, mox orationem Græcam Latinámve clarè & intentè; non tàm vocis cauſâ, quàm Stomachi lego, pariter tamen & illa firmatur iterum Ambulo, ungor, exerceor, Lavor. Nor can I approve of *Spurinna*'s abundant Regularity, as *Pliny* relates it in his *firſt* Epiſtle of his *third* Book, he tells us, thus *Spurinna* manag'd himſelf, *Ut manè lectulo contineretur, hora ſecunda indueretur, ambularetque millia paſſuum tria, mox legeret, vel colloqueretur, deinde conſideret, tum vehiculum aſcenderet, peractiſque ita ſeptem millibus paſſuum, iterum ambularet Mille, iterum reſideret, vel ſe Cubiculo aut Stylo redderet; ubi hora balnei nunciata foret, (quæ erat hyeme*

me nona, æstate octava) in sole, si caruisset vento, ambularet nudus, dein pila moveretur vehementer, & diu; postmodùm lotus accumberet, & paulipser cibum differret. This is a great deal too much, this is over-doing, Life is not worth such anxious Regularity, a generous Negligence is much more preferable in a State of Health; but if a Man happens to be seiz'd with a Distemper of such a Nature, that Exercise is absolutely necessary to the Removal of it, he would be wanting to himself, and very much to be blamed, if he should think any Fatigue too great to be undergone for the sake of a Recovery; and I fansie there's scarce any Man in this Case, but would take Pains enough, provided he thought they would not be in Vain, which most People are now apt to suppose, because the World has lost the Sense of the Efficacy of Exercises, since the

Goths

Goths over-run the Southern Nations of *Europe*, and aboliſh'd and ſuppreſs'd many of their Cuſtoms, that they might the eaſier introduce their own; ſo that in this reſpect we are in oppoſite Extreams, if they proſecuted theſe Meaſures too much, we do too little; and I am very ſenſible how difficult a thing it is, with the beſt of Arguments, to influence thoſe who are propenſe to the contrary of what you propoſe. And we are ſo habituated to other Methods and other Expectations, have ſo many Conveniences for Support and Palliation under a Sickneſs, that moſt People are ſupinely content rather to rub on in a Sickly Condition, that does not carry the greateſt Danger with it, than reſolutely endeavour by vigorous Means to be quite deliver'd from it. And if it be a Diſtemper that threatens immediate Peril, theſe means

Means are preſently thought too trivial to have any Weight in the Cure, and People can with more Eaſe deſpair of Help, than ſtruggle with Pain in hope of an uncertain Cure; ſo that in ſome Caſes, it may be very well ſaid of the Wiſe, the Rich, the Valiant, and the Mighty, as was formerly ſaid of one of King *David*'s Generals; who, becauſe he was kill'd upon a Surprize, (which yet no Humane Precaution can always prevent,) was lamented with that ſevere *Epicedium*, *Died* ABNER *as a Fool dieth?*

THE

THE APPENDIX.

I Did not deſign, either when I begun or when I ended this Treatiſe, to add the following Account of my own Diſtemper, which gave me the unhappy Occaſion of many of theſe Obſervations; both becauſe it is no new thing for Nervous Caſes to vary extremely in their Anomalous Symptomes, and becauſe the Riſe of the Diſtemper was eminently owing to my own Raſhneſs and Folly; but having ſince been importun'd by ſome of my Friends to make it Publick, I have been the more eaſily prevail'd with ſo to do, becauſe I conceive there

ſcarce ever was any Inſtance, either among the Ancients or in our days, which does ſo palpably illuſtrate the Power of my Subject.

My Diſtemper was caus'd thus; I happen'd ſeveral Years ago to catch a Certain Cutaneous Infection, more troubleſome than dangerous, and which I might eaſily have got rid of if I had had but ſo much Prudence or Patience as to have ſubmitted to the Common, tho' not very agreeable Method of Cure; but I muſt needs take to a more cleanly, but deſperate Courſe, by making an Application to my Skin of a Subſtance well charg'd with a dangerous Mineral, and which I us'd to ſuch a Time, and after ſo extreamly Raſh a manner, as I believe never one did before me; I wore it for ſeveral Months by times, keeping it on till

till the Humour diſappear'd, and then leaving it off till it broke out again; thus I did till I began to conſider that this would not laſt always, and ſo I quite laid it aſide; but the Miſchief was bugun, tho' I was not aware of it; for about a Month after I had left of that Pernicious Practice, I wak'd one Morning with an unuſal Giddineſs, and a little time after, I found ſeveral Convulſions begin to come upon me, not only ſlight ones, in the Capillary Arteries of my Eyes and other Parts, but ſome deeper; as ſometimes I ſhould have one of my Hands drawn in, and my Fingers brought to the Palm of my Hand involuntarily. When I found things thus, knowing what I had done, I was not a little terrified, as any one may imagine, but by applying to a good Phyſician, by the Help of Bleeding and other proper Means, the Severity of the

Symptomes went off, and I remain'd only with a Giddineſs, which was very troubleſome, but notwithſtanding which, I might be ſaid to be in pretty good Health, as having a good Habit of Body, and being more ſtrong and robuſt, than many People that are free from ſuch an Inconvenience. Thus I continu'd for ſeveral Years without any great Alteration happening, except that once upon Drinking the Bath-Waters too long, that vertiginous Rotation was ſo increas'd, that I was laid up for Month with it, being ſcarce able to go about without Staggering like a Drunken Man; this, conſidering the Strength I had notwithſtanding, made it reaſonable to ſuſpect, as moſt that I conſulted did, that there might be ſome Mercurial Particles lodg'd in ſome Excretory Ducts of my Brain, but this Extremity abated,

and

and I remain'd Healthy under that Giddineſs for ſeveral Years, till happening once to be more indiſpos'd than uſually, upon the taking of a Chalybeate, the Humour ſtruck deeper into the Nerves of the Pectoral Muſcles, ſo that I found my Shoulders ſometimes begin to be contracted involuntarily, and upon walking, I found a Shortneſs of Breath, which I could plainly diſcern, was caus'd *ab extra*, that is, by the Preternatural Preſſure of thoſe Muſcles, upon my Breaſt, which I have ſometimes reſiſted ſo far, when it has happen'd to come upon me in the Streets, before I could get to a Houſe that I knew, that it has made my Eyes flaſh, and brought other Epileptick Symptoms upon me, in ſo much that I have been forc'd to take into a Shop, and deſire leave to reſt me for a time. Theſe

things continu'd on me a Year or more, during which time, if I had then known the Prevalency of Riding, I might have prevented a long Scene of Sickneſs, for declining under theſe Spaſms of my Breaſt, I was at length quite confin'd to my Home, for near Three Months, all the while growing worſe and worſe, in Spite of the Power of any Medicines I took; when it happen'd that I was caſually directed to the Uſe of Riding by the great Alteration I found in me, upon being one Day carried out in a Coach about a quarter of a Mile, when I was in that low Condition, that made me reflect on ſome of Dr. *Sydenham*'s Notions, which, like others, I had before ſlighted and diſregarded, and I determined to try what Riding would do; in Order to which, I remov'd to *Hamſtead* for the Conveniency, where I rode at

at leaſt twice a Day for the Space of Seven Weeks, without ſo much as intermitting one Day; and I had Encouragement enough to keep cloſe to it; for I found as Manifeſt a Progreſs in my Recovery, as ever was diſcern'd in any thing that is either Natural or Artificial; and I can't here omit one thing very Remarkable, and which gave me the greateſt Aſſurance of Succeſs, and which ſhews beyond Contradiction, how peculiar this Exerciſe is to Caſes of the Nerves; after I began to Ride, I found conſtantly upon the Uſe of that Exerciſe, a Tingling in the Ends of my Fingers, which was accompanied with a Senſe of a gentle glowing Heat; and as I grew ſtronger, and perſiſted in thoſe Means, I perceiv'd this Senſation proceed farther, for then I felt it in the Crown of my Head, and at length in

my Tongue, in my Eyes, and at laſt all over my Body. This I acquainted my Phyſician with, who thought it a certain Pledge of my Recovery, as being aſſur'd that it was caus'd by the Spirits Recovering the Paſſage of the Nerves as in a State of Health, and ſo it prov'd; for as they paſs'd farther and farther in the ſame manner, the Senſe extended it ſelf to my Waſt, where I ſhould have, after Riding, a Senſe of Tingling and Heat, as ſtrong, as if I had expos'd my Breaſt to the Sun, or pour'd warm Water upon it; any one may imagine what a Pleaſure this muſt needs be to one in my Circumſtances, to find my ſelf as it were *Renaſci*, and all the parts of my Body gradually receive a kind of New Life. By this it is plain, how much I was Relax'd before, and how agreeable to the Nature of the Nerves,

that

that moſt Excellent Exerciſe is. This *Phænomenon* has given me very Serious Reflections, when I have known ſome, who have ſtood almoſt in as much need of the ſame Meaſures as my ſelf, tho' their Indiſpoſitions have riſen from different Cauſes, and in whom in all Likelyhood the ſame Method of Riding would have produc'd ſome of the ſame hopeful Symptoms; I ſay, it has given me ſerious and troubleſome Reflections, when upon ſuch Occaſions, I have not thought it proper, to recommend the ſame Means, or ſhew the Reaſons, why I would recommend 'em, as being ſure that if I did, they would be rejected with Deriſion. So that I have often with ſome Regret admir'd the Incongruity of the Circumſtances of Humane Life, how little Reaſon Man has to be Proud, notwithſtanding his Wiſdom and Coun-

cel, when even in the greateſt Concerns of his Life, Cuſtom, Mode, Phancy, and many other Circumſtances, may ſo envelop him with Prejudice, that it may ſo happen, that in ſome Caſes of Diſtreſs, one Man may be Morally certain, of what will help another, and yet it may be the moſt abſurd thing in the World, to diſcloſe it to him, and impoſſible to convince him if he ſhould. I have the more amply related this unuſual Circumſtance, becauſe it ſeems to me to illuſtrate above any thing whatſoever, the Influence of Riding, on the Nerves or Solid Parts of the Body; and as ſtrange and unheard of a Symptom as it may ſeem to ſome, I can averr it is a moſt ſolemn Truth, and what I had frequent and reiterated Occaſions to obſerve.

After

After I had by theſe Means recover'd a good Meaſure of Health, I enjoy'd it about a Year and a Half, by the Help of Riding at due Intervals; and I was pretty ſtrong, and able to make conſiderable Journeys, which my Affairs then required. But in thoſe Journeys, I was ſo unfortunate, as to abuſe that moſt excellent Expedient, that I had receiv'd ſo much Good from; for, thinking my ſelf ſtronger than I really was, and Riding long Journeys beyond my Strength, I was took on a ſudden, and in the midſt of a Journey, with the ſtrangeſt ſort of *Deliquium* that perhaps ever was heard of, in which I was forc'd to drink ſuch quantities of Spirituous Liquors, as at another time would have made me more than ordinarily Drunk, which then could ſcarce keep Life in me; to theſe ſort of Fits after ſome time was added a

Diar-

Diarrhœa of a peculiar and ſingular kind, which was attended with a Naufeouſneſs and Inclination to Vomit, more than is uſual in that Caſe; and when the *Diarrhœa* at any time happen'd to be a little more violent than ordinarily, a Spontaneous Vomiting enſu'd, as violent as if I had taken a ſtrong Emetick; and what is remarkable, thoſe Nights after my Vomiting, I ſhould Sweat to that degree, as to make my Shirt and Sheets as wet, as if they had been dipt in Water; upon which, inſtead of being weakned, I was refreſh'd, and freed from the greater ſeverity of theſe Symptoms for ſome Days; which plainly ſhew'd, how pernicious that Pſoradick Salt was which the Mercurial Particles had repell'd, and intimately mix'd in my Blood. Thus I had three Calamities upon me at once; a Flux, a Vomiting, and the *Deliquiums* I

ſpoke

ſpoke of before; the laſt of which had ſomething ſo incredible in 'em, that tho' moſt ſeverely true, and known to ſeveral in this City, yet I ſhall forbear to relate it in this place, leſt I ſhould be thought to exceed the Truth, by telling that which ſcarce ever had a Parallel; I ſhall only ſay, that the Gripes and Vomiting were comparatively a Pleaſure to this, I do not ſpeak in Heat, but Seriouſly and Calmly, that the Vomiting, tho' ſo frequent and ſevere, was deſireable, if compar'd with theſe moſt ſtrange Faintings; which were ſo tormenting and inſupportable, that if I had been Stab'd, or had had my Fleſh cut with Knives, I am certain I could much eaſier have born it. Under this Complication of Miſery, I was deny'd likewiſe the Eaſe, which is to be obtain'd by *Laudanum*, which I was prohibited by the Nature

ture of my Circumſtances, and by very good Advice, directed to abſtain from it. And as for Emeticks, there was no uſing of them for other Reaſons; ſo that the Buſineſs was left wholly to Stypticks, which not putting the leaſt ſtop to my Diſtemper, I reſolv'd to betake my ſelf to Riding again, having Reſted ſo long, and would try if uſing it moderately and frequently, might not keep up my Spirits, as formerly it had done, and it prov'd according to my Hopes; for by diligent and fervent Application to theſe Means, I made a ſhift to ſupport my ſelf, and keep things in an *Æquilibrium*, under theſe preſſing Circumſtances; inſomuch that I held out, even under ſuch Severities, as I have related, no leſs a time than a Year and Nine Months, when at length theſe Evils gain'd upon me, and my Vomitings were ſo frequent,

quent, and incredibly violent, that they took away the Uſe of my Limbs, when I was forc'd to be lifted every time upon my Horſe, that I might continue my Riding, tho' it were but to gain a little Periodical Eaſe; till that Seizure on my Limbs encreaſing, I was confin'd to my Chamber, my Legs and Thighs ſwell'd, and in the Opinion of three Phyſicians, whoſe Aſſiſtance I then had, I was very near the End of this (as it was Literally to me a) Tedious *Journey* of *Life*. When it pleas'd God, that in this Extremity, one of thoſe Phyſicians was ſo happy, as to direct me to a mild Chymical Medicine, too ſeldom us'd for that intent, which ſtop'd my Vomiting, and created a ſudden and ſurpriſing Change in me; the Swelling of my Legs went off in leſs than three Weeks, and in about ſix Weeks time, from that

that emaciated Condition, I was as Fleſhy, as in a perfect State of Health. By this it is plain, that the great ſtreſs of Vomiting threw off the Humour, and that the Swelling of my Legs was in part, if not altogether, Critical, and that the habituating my ſelf ſo very much to Riding, did enable Nature to throw off the Humour that way, and ſupport her under the Shock of thoſe numerous Vomitings. After this by the Uſe of Chalybeates, taken for a great while together, and with Riding upon it, I recover'd as good an Appetite and Digeſtion, as I had before theſe Vomitings came upon me, and my Flux entirely ſtop'd; and for theſe two Years laſt paſt, I thank God I have liv'd an Eaſie and Happy Life.

Thus I have given a ſuccinct and true Account, of a Long and Severe

Severe Diſtemper, which it has pleas'd Almighty God to lay upon me; by which it is plain, that as ſome Men are diſtinguiſh'd by Riches, Honours, and the like; others may be as remarkable in the Degrees of their Affliction and Anguiſh, and may be forc'd to paſs not only Days, but Years of that which we call Life, after ſuch a Manner, that if it were not for higher Conſiderations, it would be far better not to be. That in the very beſt of a Man's Years, in the time of Hopes, Proſpects, and Advantages, a Man may be ſo wretched as to be debar'd the Capacity of making uſe of 'em, and in a Senſe, Buried Alive.

But ſince I have offer'd the World a Relation of my Diſtemper, I ſhall make bold to take Notice of two or three things obſervable in it, which may perhaps be of

of uſe to ſome, tho' the very ſame Diſtemper I hope will never be the Lot of any one. And this the rather, becauſe thoſe Remarks are agreeable to my Subject.

Firſt then, I think it is very clear, from the Circumſtances of my Caſe, that where Indications ariſe, which run Counter to one another, which every one knows is the worſt of Difficulties a Phyſician meets with; in ſuch an Emergency, nothing can be ſo likely to balance between 'em, as the having recourſe to ſome proper Exerciſe, if poſſible; for it is hard but it will ſuit with one of thoſe Circumſtances, and not improbable, that it will give help in both.

Secondly, From the Ceſſation of my Gripes as ſoon as ever I got on Horſeback, I am convinc'd that Pain

Pain may be very much obviated or mitigated by the Motion of the Body, that is, by thoſe Means a Man may make a ſhift to ſet looſe from it. It was a piece of Extravagant Nonſenſe in the Scepticks, to pretend to Reaſon with Pain, and account it no Evil; a Man might as well pretend to Fence againſt Hunger with Reſolution, and be accounted blameable for Starving through Want of Victuals; undoubtedly Pain is the greateſt of Evils to the Body, and that which we cannot but endeavour to free our ſelves from; but till that can be done, it will be a Happineſs, if we can ſo manage things, as to perceive leſs of it, or as I ſaid before, ſit looſe from it; and that I think may certainly be obtain'd from the Motion of the Individual, of ſuch or ſuch a kind, as the Pain will beſt admit of. Not only Thought,

but the Perception of a Pain, may be in ſome Meaſure interrupted by a ſwift Motion, for that Perception cannot ſtrike ſo ſtrong at ſuch a time; a Man that ſhould ſet himſelf to Muſe on a full Gallop, would think but very incoherently, and if Thought it ſelf may be thus broke off, certainly the Senſation of Pain, which can be no quicker than Thought, may be likewiſe happily interrupted and rendered more Dull. Theſe Conſiderations would be of real Service to Perſons afflicted with Scorbutick Pains, if they could induce 'em to a Reſolute Practice of Riding; for all thoſe Pains in the Shoulders, Back, or Hips, would gradually abate in the time of that Exerciſe, as well as by the Habit of it, the Cauſe would be remov'd. But moreover there are other ſorts of Geſtation or Voiture, that are ſuitable with the keeneſt

keeneſt Pains, as the Motion of a Boat, a Litter, a Chair, a Swing, and the like, in theſe there are no *Motûs Contrarietas*, as Dr. *Sydenham* calls it, no Jolting, which in ſome Caſes, as in the Gout, is not tolerable; but they may be apply'd to the ſevereſt Caſes, and I doubt not would ſooth the Spirits, and give great Relief. And here I cannot but think that a good Mechanick might invent ſome Machine, after the manner of the *Petaurus*, or the great Swing of the Ancients, which might be of the greateſt Service to People in the Extremities of the Gout, by diverting the Senſation, and turning the Edge of the Pain: A Man that has been laid up for ſeveral Weeks, would certainly find by ſuch a Motion, as great an Alteration, as one who has been confin'd to his Bed for ſome time does upon his firſt getting up,

which is very great; and certainly if the *Romans*, out of Luxury and Wantonneſs, could be ſwung to Sleep in Hanging Beds of Silver, it may be allow'd, that a Perſon in Torment may uſe the ſame Means to obtain Eaſe. I don't know why a Motion upon a Round, ſhould not do ſome Service in this Caſe, for there would be a ſort of Sickneſs in the Stomach, caus'd by the Rotation, which would withdraw the Spirits from the Place of the Pain; and moreover undoubtedly diſpoſe to Sleep. Theſe things cannot be thought Extravagant, if they can ſuffice to give any the leaſt Eaſe to Men under ſuch Pains, as thoſe of the Gout, when the *Carnificina* laſts ſo long, as to exceed in ſome Meaſure all Humane Patience; when *Non rectius Podagræ quam Iracundiæ Paroxyſmus omnis dici poteſt*, as Dr. *Sydenham*, who

who knew too well what it was, ſays of it; I ſay, in ſuch Extremities, nothing ought to be thought Ridiculous, that can afford the leaſt Eaſe. I could ſay much more on this Subject; I could Name a very Worthy Gentleman, who not long ago had ſuch an odd ſort of a Colick, that he found nothing would relieve him in the Fits of it, ſo much as lying with his Head downwards; which Poſture prov'd always ſo Advantageous to him, that he caus'd a kind of Frame to be made, to which he caus'd himſelf to be faſtned with Bolts, and then his Servants were to turn him with his Head downwards; after which manner he hung till his Pain went off: And I hope none will ſay it was unbecoming a Grave and Wiſe Man, to make uſe of ſuch odd Means to get rid of an unſupportable Pain. But I have per-

haps already ſaid more than will be reliſh'd by ſome of thoſe Gentlemen, who are ſo happy as to be really Ignorant, or to have but very ſlight, and imperfect Notions of the Nature of Pain; and before they cenſure me, they would do well to peruſe Mr. *Collier*'s Excellent Eſſay upon Pain; where they will find ſuch an Account of it, and ſuch Inſtances of the Behaviour of Healthy and Strong Men under it, that they will the more eaſily admit, that for the Sick and Infirm, it may be in ſome Meaſure feaſible to avoid, as it were, the Senſations of Pain, and, as much as can be, ſit looſe from it.

The next and laſt thing which I ſhall take Notice of, in my Diſtemper, is the Frequency of thoſe Vomitings, and that notwithſtanding they laſted ſo long on me,

me, I receiv'd no harm from 'em. It is a great Misfortune in the buſineſs of a Phyſician, that he finds ſo many People averſe to that ſort of Phyſick, whereby he is compell'd to proſecute a Cure by more uncertain and inefficacious Means; whereas if thoſe Perſons did but conſider, they might eaſily find Arguments to convince 'em, that there is no ſuch Danger as they apprehend, in the uſe of Moderate Emeticks, where there is no *Mala Conformatio*, nothing in the make of the Breaſt that forbids it. They may conſider that the Vomiting which comes upon going to Sea, tho' it laſts ſometimes two or three Days together, and all the time ſeems as violent as that we procure by our Emeticks, yet it never hurts any one, and does not much weaken thoſe who have undergone it. I know two Gentlemen who were Sick all the time

time of their being upon the Sea, one of them all the time of his Paſſage to and from the *Weſt Indies*, and yet they receiv'd no hurt by it. And I don't know but I my ſelf have Vomited as much as any ten Men Living, and yet am not in the leaſt hurt by it. And we are furniſh'd with Medicines, ſo gentle and commendable, that they may be repeated at reaſonable Intervals, without the leaſt Danger of any ill Conſequence.

From theſe Conſiderations of the great Εὐφορία with which we bear Vomiting, tho' it ſeems ſo troubleſome while it laſts; I am convinc'd that it may be accounted for after the ſame manner, as Gymnaſtick Effects are; beſides that the riſing of the Pulſe upon the Stimulating and Irritation of the Fibres of the Stomach, and the exceſſive Preſſure and Shock of

of the Glands of ſeveral parts, with the other *Phænomena* of Vomiting, ſhew that it does partake of the Nature of an Exerciſe, and it is a great Happineſs for the Individual, that the Author of Nature has allotted ſuch Secondary Uſes of the Stomach, Diaphragm, and other parts imploy'd in Vomiting, that they ſhould not only ſerve to throw up what is diſagreeable, but ſtrengthen the whole Oeconomy in that very Act. And here if it be allow'd, that the Irritation of the Ventricle does raiſe and ſtrengthen ſo much, I can't but think I may venture to propoſe it, as worthy the Conſideration of the beſt Judges of theſe Matters, whether when we uſe Emeticks, we ought to reſt our Expectations upon a few Momentary Efforts, when we ſee Nature will bear the carrying on of the ſame Meaſures ſo much

much longer; that is, whether it would not be more expedient in ſome Caſes, to give our ſafe and gentle Emeticks in leſſer quantities, than we do, *viz.* ſo as to make the Perſon Sick, but not to a degree ſufficient to make him throw up the Contents of his Stomach, and when that quantity of the Medicine has paſs'd off after that manner like an Alterative, to repeat the ſame Doſe, and ſo continue on that Sickneſs for ſeveral Hours, without raiſing it to that degree, as to force the Perſon to Vomit above once or twice in all the time. This, I ſay, I think is worth Conſideration, and may be of ſingular Advantage in ſome Caſes of a Conſumption, and in Hyſterick Caſes, when we do not give Vomits to cleanſe the Stomach only; for by this means we can Elevate Nature very much, and procure a juſt *Diaphoreſis*, when

when perhaps by the beſt of Cordials we may only create a Colliquation; and after this manner the Springs will be wound up more gradually; when if the Emetick paſſes off with ſtrong Efforts, and very quick, after the uſual manner, we give Nature only a Wrench, the Effects of which are ſoon over. I would not be here underſtood, as if I would put this in Practice, I do not pretend to Authority ſufficient for ſuch Innovations, I only preſume to offer theſe things, by way of Problem; and one of my Stature may ſometimes happen to ſtart a hint, which thoſe who are Taller in Wiſdom and Underſtanding may cultivate and improve to Perfection.

Theſe are ſome of the Thoughts which the Severities of a moſt tedious Diſtemper have ſuggeſted

to

to me, which if they can be of any uſe, to help to guide others to that which may deliver them from their Calamities, it would be a great Satisfaction and Recompence to me for my Pain, to perceive that it has conduc'd to another's Eaſe. But if theſe Speculations ſhall not be worthy to have ſuch an Effect, I hope I ſhall be Pardon'd upon the Account of my good Intentions; eſpecially ſeeing I am not ſingular, but have ſo very many Companions of thoſe who have troubled the World with things of little or no Moment.

MVSEVM BRITANNICVM

FINIS.

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